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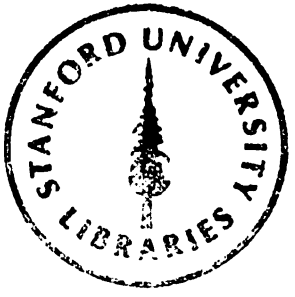

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THE DUPLICATION OF SCHOOL WORK BY THE COLLEGE

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University of Chicago

A generation or two ago the dividing line between the college and the secondary school was reasonably sharp and distinct. At present it is extremely ill defined and the indistinctness threatens daily to increase. Formerly the secondary school found almost its entire function in college-preparatory work and accordingly it covered only such ground as the college desired. Under this arrangement the college was naturally exempt from undertaking much of anything done by the school. Moreover, the materials of knowledge fit for presentation in the school were relatively limited, the curriculum was substantially inflexible and stereotyped, and as a consequence the problem of avoiding serious overlappings in the work of school and college hardly arose. The line between the collegiate and the secondary was determined primarily in terms of subject-matter rather than in terms of method, but it was well recognized and easily understood.

The wealth of subject-matter offered in a high-school curriculum today often hopelessly outruns any possibility of mastery by a given pupil within a four-year period and much therefore remains untouched which the student may possibly wish to attack at a later point in his career. The college has been willing in increasing degree to satisfy this demand and as a result we find a wide range of identical subjects taught in school and college. The mere fact

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that the two varieties of institution offer the same work is not itself conclusive evidence of waste, but a careful study of the situation leads one to question whether the present practice is really defensible in all its aspects.

The situation is somewhat complicated by the fact that many high schools, no longer content to conclude their work with four years, are going on to add a fifth and even a sixth year, with the result that the college is finding its preserves encroached upon to a very marked degree. The time seems ripe for an inquiry into the present conditions and the writer herewith makes a beginning which he hopes to carry farther in the near future.

The question at once presents itself whether the college from the standpoint of its own purely selfish interests is employing its resources and energies wisely when it duplicates to any large extent the work of the high schools. In considering this issue, we may well remember that our colleges pursue two lines in their practice with regard to the school work which they duplicate. In the one case they do the seemingly obvious thing and after a student has covered certain ground in school he is permitted to proceed in college to the next more advanced stage of the same subject. Work in the modern languages may illustrate this case. But in the second instance, where the colleges offer work which is nominally identical with that done in the schools and entrance credit is given for the same, the student, when once he is safely inside the college wall, finds himself set to doing right over again much which he has already done in school.[1] This procedure is frequently justified on the ground that the work is carried on in college from a more mature and advanced point of view. Certain courses in science both physical and biological may illustrate this case upon which we may well comment for a moment.

It would be idle to deny that the content of a course in botany given during the second or third year of the high-school course might be presented to college Freshmen or to Sophomores in a more mature and scientifically substantial way. But where the colleges find it necessary to accept such work for entrance and then pro-

[1] It is to be remembered that colleges sometimes refuse to recognize school work in any way, even for entrance. In such cases the requirement that the student begin anew is logically less peculiar.

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ceed practically to disregard it and in large measure to repeat it, one can only feel that the educational system which permits or encourages such duplication lacks co-ordination, that its earlier and later stages are out of touch with one another, and that we have in such maladjustment a form of wastage which is unfair both to the student and to the teacher.

No doubt high-school science must always vary somewhat from college science, but it must surely be possible to have high-school and college teachers of these subjects reach such an agreement as to content and method as shall save us from the present costly form of duplication. Something is surely wrong when college students who have never pursued a given subject can carry it on in college upon entirely equal terms with other students who have made a nominal beginning upon it in school. Only in those instances where the work at issue had been undertaken very early in the school course and so had perhaps been forgotten, or had been necessarily presented in a very rudimentary way, could such a situation be justified. Nor could the justification be complete here, for it is doubtful whether the inclusion of any work in the school curriculum could be defended which was done in such a manner as to give the student who successfully mastered it no advantage over his colleague who might begin the same study three years later. If students were in these cases started once more at the beginning of a subject on the ground that a review is a valuable asset in intellectual development, the practice might be more enthusiastically approved. But although such review is an incident, it is neither the cause nor the real justification of the practice, as witness the presence in the same classes, and on nominally if not actually equal terms, of students who are taking up the subject for the first time.

A justification which one often hears urged for the procedure is that the teaching of certain subjects in the schools is so incompetent as to make it essential for the college to start its work from the beginning. No doubt in individual instances this might prove to be true, but as a general indictment it cannot be accepted. It would be just as applicable to one topic as to another if framed as a universal charge and we have already seen that the colleges accept and build upon a large amount of school work, however many

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reservations they may entertain as to the efficiency of the high-school instruction.

The obvious moral of all this seems to be the need of intelligent collaboration between high-school and college authorities. It is surely futile to contend that high-school teaching is and must remain so uniformly bad that the college can be justified in systematically disregarding any work done in the secondary school. If there are subjects now given in the early years of the high-school course which cannot be properly given at that time, school and college teachers ought to work out the problem of the wise point at which such courses may be introduced. If the school is justified in giving its work in a way not exactly in parallel with the corresponding work of the college, then that fact ought to be clearly understood and the best possible adjustment worked out. At present the college is prone to judge the performance of the schools purely in terms of its own prepossessions and these may do justice to only a portion of the entire situation. The school, on the other hand, is likely to proceed on the basis of the individualistic bias of the teacher momentarily in charge of its courses. Substantial progress is only possible by means of a co-operation based upon a large and intelligent outlook upon the whole educational problem.

Reverting to our original question we may state it in general form thus: Is the modern college justified as a matter of general educational policy, a matter of the most judicious expenditure of its means, the most useful service to the community, in offering any considerable amount of work which the schools are prepared to give and which in actual fact they do give? Put in more specific form and from the pedagogical viewpoint as it would arise in connection with modern-language instruction for example, the problem may be formulated in this way: Is it not clear that for the college to continue to offer an unlimited quantity of beginning work is simply to encourage the indefinite maintenance of unwholesome educational tendencies in accordance with which the mastery of these subjects is postponed to a period when they are acquired with a maximum instead of a minimum of difficulty?

One is disposed to say that in view of the widening reach of the field of knowledge the college may with propriety undertake a cer-

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tain amount of work obviously lying on the boundaries between the schools and the colleges, but that it should jealously examine every such invasion of school territory to make sure that by reason of it there is not encouraged and perpetuated the postponement to a late point in the curriculum of studies whose prime educational justification is to be found when introduced early. Furthermore, the college may well take thought when it discovers that any considerable fraction of its energy is going into work of this type. After all, the first duty of a college is to offer collegiate work and those who wish to continue secondary work indefinitely may properly be referred to secondary institutions. An education made up wholly of beginnings is a poor thing and the actual courses pursued by many of our college students display an amazing amount of such achievement.

There is no reason to suppose that the conditions in the University of Chicago vary materially in this particular from those characterizing other institutions of higher learning in the United States. Certainly the University has on more than one occasion and by more than one device attempted to protect itself from the disposition of many of its patrons to occupy an undue amount of their college life with elementary work. Despite this fact, an examination of the records of a large number of recent graduates indicates that fully one-third of their entire college course was given to work which could have been pursued in any one of our better high schools. The University requires for its degree that at least one-third of the work presented by a student shall be of the Senior College grade, that is to say: shall be work of an advanced character. Many students actually pursue considerably more such work, but it is perfectly clear that despite this fact a very large fraction of the studies taken are secondary rather than collegiate in kind, although they may be presented in a manner more mature and thoroughgoing than is usual in a school.

From the administrative point of view this means that a very large part of the instructional energy of the institution has gone into work of this type and that a very considerable amount of its resources has been drawn upon to support such instruction. Again it should be repeated that the conditions in this institution are as

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regards this particular matter in no wise substantially different from those characterizing other American universities of the first class. Whether or not this very large reduplication by the college of work offered in the schools can be financially justified seems more than problematical. Certainly no one who has faced the facts directly can fail to agree that much still remains to be done by intelligent co-operation in minimizing this type of duplication. If the schools are able and ready to take charge of these courses, the college may well be willing to abandon many of them in order to contribute more of those things which no school is either able or ambitious to attempt.

If the discussion be transferred from such general issues as have been above touched upon and one comes, as one ultimately must, to an analysis of the specific details at issue, one is likely to feel that although the general line of advance is very obvious, progress on that line can be and ought to be much more rapidly achieved in connection with certain subjects than in connection with others. Thus in the case of the modern languages, so far as concerns the strictly educational aspects of the problem the writer does not chance to know anyone who demurs to the proposition that their study should be begun not later than the secondary-school period and if possible in the primary grades. This program of course involves their pursuit in large measure by means of the so-called natural method. But whatever divergence of opinion there may be concerning the proper method of studying these languages in college, the writer has never heard any serious objections to the plea for the natural method with young children. Educationally, psychologically, practically, it would represent a prodigious saving of time and energy if we could get these topics back into the elementary and secondary schools.

Moreover, it is very difficult to feel that the beginning of a modern language can be made in any very strict sense collegiate work. Something could surely be urged for discounting it as being on a lower level than certain other forms of college work. To get rid of the burden of teaching this rudimentary material to class after class of college students would be a boon which every college department of modern language would appreciate to the full.

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The difficulty confronting us is therefore the practical one of disposing of the student who comes from the secondary school without his French and German. What can be done to induce the student to secure this work in school, to coax the school to offer it persuasively at an earlier age than at present? Can the college in fact afford to refuse such elementary instruction?

Evidently any one college attacking this problem alone and single handed would find its course beset with trials; but here, as in so many educational problems, co-operation is no idle dream, and what one alone might not accomplish, many working together can readily achieve. It is in the direction of concentrated action then that any large and reasonably prompt results are to be looked for. If the schools can be induced to introduce modern-language work in the grades and can be induced to keep such work vividly in the foreground in the secondary period, and if school and college teachers can be gotten together in a program of intelligent co-operation, we can expect to see the college rapidly lopping off a large part of the incubus of its elementary language work—work which it can do only at great disadvantage and which done on any terms is hardly collegiate.

The situation which confronts us in the organizing of our work in English is in many respects even more unsatisfactory than that peculiar to modern languages. In the case of English, however, as in the case of the sciences, referred to a little above, the main difficulty appears to attach to the reduplication of substantially identical work, rather than to the question of an undue deferment of work which should have been started in the school period. The history of the child who was confronted with the beauties of *Evangeline* at six different points in his school and college training is typical of the type of mal-co-ordination which still, to a considerable degree, characterizes the relations of our English instruction in the schools and the colleges. The colleges frankly offer elementary courses in English which traverse ground substantially identical with that covered in the schools. In certain cases the college permits students to proceed in their election of college work to courses which are nominally in advance of those pursued in the school. In other cases the student is held back and required to

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repeat what is essentially the same work already asked of him by the school. Here again, as in the case of the sciences, the justification offered is generally either that the teaching in the school has been poor, or that the student has failed to profit by it sufficiently to justify allowing him to proceed to the next stage of advancement. Nevertheless, in this case as in that of the science work, the college is willing to accept this poorly done English as fulfilling part of the entrance requirements. This case appears to offer another instance of maladjustment which could presumably be removed by a sufficiently careful and intelligent co-operation between the authorities of the school and the college.

History offers an instance in some regards still more annoying to the student. The writer knows an institution in which one or two or even more units of history are accepted for entrance and nevertheless the student presenting them is required to go into the same elementary college classes with students who present no history at all. Here the actual and obvious repetition of considerable portions of the subject-matter renders it more difficult to justify the procedure to the student.

Political economy, civics, commercial geography, physiography, zoölogy, botany, physiology, to mention no other subjects, all present similar anomalies. The college accepts the high-school credentials in these topics as valid for entrance and then permits or requires the student to start at the beginning once again if he wishes to pursue these subjects in college.

The writer recognizes that colleges vary in their practice concerning these matters, but the conservatism of one institution at one point is likely to be offset by a corresponding leniency at some other, so that the sum total of the case is likely to be found substantially as the above statement would indicate.

Physics and chemistry represent a more advanced condition of intelligent co-operation between school and college than do most of the other sciences, a fact which in part indicates greater progress in the standardizing of elementary work in these subjects, and in part bespeaks a more successful facing by school and college teachers of the problem presented by the articulation of school and college work. Even in these sciences, however, nothing is more

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common than to hear college teachers complain of the poor preparation of the students who reach them from the schools, and in some institutions special provision is made for classes which do not exactly repeat the elementary work done in the school, but nevertheless approach the subject in a manner somewhat different from that followed by the classes constituted of students beginning the work in college. Even here, then, there is still some room for further progress in the relations of the school and the college courses.

In the case of the biological sciences the difficulties presented are numerous and perplexing. The laboratory equipment of many schools renders it difficult to do satisfactory work in these subjects and they are quite often given during the early part of the high-school curriculum, so that their content is apt to be relatively very simple, in purpose at least, and by the end of the school course a considerable part of the information gained is likely to have been forgotten. Moreover, the exigencies of local conditions, to say nothing of the intrinsic wisdom of such procedure, often lead the teachers of so-called nature sciences to offer courses in which zoölogy and botany are blended in a way that makes it difficult for the college to regard the work as an adequate preparation for the college courses which commonly distinguish somewhat sharply between these two divisions of biological science. Moreover, some schools have attempted to give under the heading of biological science courses which include other scientific considerations than those peculiar to botany and zoölogy. For example, a certain amount of physiology and even physiography may be incorporated in such courses. When the college is reached and the differentiation of these subjects is encountered, it is obvious that the training offered by such a general preliminary course can hardly display the disciplinary results characteristic of the college elementary work in specialized fields. Here again, then, there is obvious need for much more detailed study by joint commissions of school and college teachers before we may hope to secure any really satisfactory adjustment of the biological work carried on by the two types of institutions.

The work in civics and in commercial geography presents in one way a simpler situation, for these topics are perhaps less likely to

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be offered by the school in such fashion as to invade other outlying fields. On the other hand, they are apt to be presented at a rather early point in the school curriculum and thus to suffer from considerable immaturity in the form of presentation and are likely to be rather completely forgotten by the time the student has reached college.

Political economy, on the other hand, is likely to be given later in the course, and if the teachers of this subject are able to come to some agreement as to the proper content for such a course in the school and as to the wise methods for presenting it, there seems to be no reason why the most wasteful aspects of the present practice may not be overcome. It is not uncommon at present for colleges to offer the work in political economy under such conditions that students ordinarily come to it in the Sophomore or Junior year. It is clear that so long as this practice continues it is to be expected that the content of the beginning courses in school and college should show considerable disparities, and in proportion as these are large and fundamental, the objection drops out against allowing or requiring students to pursue these elementary courses in college, even though they may have had some previous high-school work under the same title.

One thing emerges from our discussion with entire clearness, to wit, the practices at present in vogue result in a wholly needless waste of the students' time, much of which could presumably be avoided by intelligent collaboration of school and college teachers. It also appears to be reasonably certain that the college could employ to better advantage for all concerned some of its resources which are now devoted to teaching subjects that can unquestionably be best presented in the high school. How to bring about the changes necessary to secure the desired results remains to be determined.

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THE MEANING OF SECONDARY EDUCATION[1]

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The student of American educational institutions finds himself very much confused when he attempts to discover the point at which the typical high school begins, and the point at which this middle school ends. There are many high schools in this country which carry on courses that in other communities are thought of as belonging to the elementary grades, and it is well known that many of our American colleges are in fact high schools in every respect except in name. This overlapping is evident in such details as methods of organization and subject-matter of instruction. Take such a characteristic as departmental instruction. In the high school and upper schools all instruction is departmental, that is, the work of the mathematics department differentiates itself with great clearness from the work of the English department and from that of the Latin department. The tendency to adopt this mode of organization has of late appeared more and more in elementary schools, especially in the upper grades. In defense of this mode of organization in the elementary school, it has been pointed out that departmental classes give greater freedom of adaptation of school work to individual needs. Departmental classes permit students, for example, to go forward in certain lines, even though they may have failed in others. Departmental work also makes it possible for students to elect to some extent those courses which are best adapted to their future work. Again, it is said that the instruction is more efficient because the training of the teacher and the interest of the pupil are more highly specialized. In these and other respects the upper grades of the elementary school are supposed to gain by approaching the type of organization typical of the high school.

On the other side, if we examine the college course, we find that there is great similarity between the work of the Freshman year

[1] Delivered at the Maine State Teachers' Association, October 25, 1912.

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and the work of the high school. This is perhaps most strikingly illustrated by reference to the subjects of instruction. There is not an American college in existence which does not offer elementary work in modern languages, elementary work in science, elementary work in history. More and more there is a tendency for the colleges to offer elementary work in classical languages. Greek has been almost entirely carried over to the college. Even the elementary phases of Latin are now being offered in many colleges. It is difficult to determine how far this tendency will extend. Without waiting for future developments, however, we are compelled, even at the present time, to say that the Freshman year of all American colleges is just as much a stage of secondary education as is the work that is carried on in high schools.

In Germany one of the chief marks of distinction between secondary education and higher education is to be found in the fact that the secondary student is put through a required curriculum, while the student in the higher schools, especially the universities, is allowed to elect freely the courses which he wishes to pursue. In this country we have experimented extensively with the required and elective systems. It is perhaps bold to make any statement about what is generally accepted in the matter of elective courses, but there seems to be a tendency to mark off the immature student of the high school and first years of the college from the mature student of the later college years. One may venture the statement that it is characteristic of the high-school period that the student must be carefully supervised in his selection of courses, and must be guided into those courses which form a coherent curriculum. It is certainly the prevailing experience of colleges that the Freshman and Sophomore must also be guided in his selection of courses. The free elective system is successful with advanced students in the Junior and Senior years of the college, but it is certain that the Freshmen and Sophomores are not yet prepared to elect without careful supervision and guidance. In this respect, therefore, it is obvious that the first two years of college and the high school are parts of the same general period of education.

The intimate relation between the high school and the institutions above and below is so vital a fact in American education that

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many movements have sprung up in different parts of the country looking toward an extension of the high school in one direction or the other. We find many high schools which induce students to stay on for work after they have graduated. These institutions are developing in the direction of what is now classified as college work. On the other hand, we find that many of the schools which aim to do secondary work as their primary function find it necessary to have a preparatory class for students who come from elementary schools which are inadequately equipped to give a complete training in the so-called common branches.

Perhaps the most significant extension downward of the domain of the secondary school is that which is coming in response to the demand for vocational education in the lower schools. Children who are not sure of going to high school must be allowed to pursue differentiated courses in the upper grades of the elementary school. The boy who is going into the trades and has no thought of high school cannot with equity be required to do the same work that is required of the boy who is going to become a clergyman and looks forward to a college education. Many boys have to make a choice between the trades and professions before they leave the seventh grade. The seventh grade must provide for such boys by adopting a type of organization similar to that now established in the high school.

The facts which have been pointed out thus far show how vague is the present definition of secondary education. They also challenge us to a thoroughgoing consideration of what is to be done in order to direct intelligently the evolution of our American school system.

I am going to venture to make the next part of my paper as concrete as possible, by referring in detail to the schools with which I am best acquainted, namely, the Elementary School and the High School of the University of Chicago. These two schools differ in some respects from the ordinary schools of like grade, but we are prepared to defend the thesis that what we do could be advantageously considered by all elementary and secondary schools. The schools are the laboratories of the Department of Education, and the business of the department is to understand as fully and

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immediately as possible the opportunities of economy and co-ordination of organization.

Let me begin by commenting on the problem of organizing the English in the two schools, so as to avoid unnecessary duplication. It was found that the upper grades of the elementary school spent much time in reading some of the classics, and in studying the elements of correct composition. Most of this was repeated in the high school. Thus we had going on under our own roof work so repetitious that a child who went through the two schools repeated in the first year of the high school much that he had done in the elementary school. There is nothing so destructive to a child's interest as the thoughtless repetition in which our schools indulge. We who are older in years and patient in mind would refuse to listen to the same sermons gone over again and again. But we seem to think it our duty to make children go over the same poem or story several times. The conscientious child reads the poem at home. He comes to class and hears some other child read it. The teacher then reads it. The conscientious child now reads it again, in review, and takes an examination on it. He goes on into a higher school and a new teacher takes him in hand and announces with great enthusiasm that now this same poem will be read and studied. "Please read the poem several times at home before coming to class tomorrow!" When tomorrow comes the poem is once more read by someone, as though it had never been read before, etc., etc. One parent said to me not long ago, "My boy is now reading and studying the 'Ancient Mariner' for the third time. He read it in the eighth grade, he read it in high school, and now his class in college is taking it up!" Is it any wonder that we find students more intelligent about the working of our elective system than are we ourselves? Think of three teachers of English managing the destinies of a boy and the interests of the "Ancient Mariner" absolutely ignorant of the sphere of each other's work and influence.

We found in our schools that a little consultation between the English teachers brought out enough of these repetitions so that we were able to eliminate one year of English. We put the children who had done our eighth-grade English directly into second-year high-school English.

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We found a similar situation in science. In common with the better elementary schools, ours has introduced a good deal of science work. In the first year of our high school we are giving a general science course. This we believe is also in keeping with the best practices. Yet there is lack of co-ordination here. We encountered some embarrassment in dealing with two types of students who enter our high school. There are those who come to us from schools which have very little nature-study. For such students a general first-year science course seems to have many advantages. For other students, especially those who come from schools teaching much nature-study, this first-year general course is very uninteresting, because it is so repetitious and elementary. What shall be done? The remedy seems simple, but it requires the intelligent co-operation of two schools. Let the elementary school administer much general science, let the high school take up the specialized sciences and give the student more systematic differentiated courses.

A third illustration may be drawn from our experience with language instruction. For a number of years the Elementary School of the University of Chicago has offered to students in the fourth grade and upward the opportunity of electing a modern foreign language. The student may take either French or German. Whichever language he elects, he will pursue this study during the remainder of his elementary-school course. He does not have each day as long a period of study as he will have when he comes later to take up the same subject in the high school. He does not undertake to do the same kind of work. For example, he does not, in the elementary course, emphasize grammatical study. He does however acquire the ability to pronounce the language at a period in life when it is easier for him to take on the pronunciation of a foreign language than it will be when he grows older and more fixed in his methods of pronunciation. We regard the courses in modern language as very desirable in the Elementary School. It was found difficult, however, to take advantage of the work which the children had done in the Elementary School, when these children came to the High School. The instructors in the High-School department did not know exactly what had been done in the

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lower grades, and the methods which had been pursued in the lower grades were not identical with those which were used in the High School to train up introductory students. As a result many of the children who had spent four years in the Elementary School in studying modern languages were obliged to begin the work as though it were entirely new on entering the High School. This showed of course that there was no proper correlation between the two institutions. Gradually an arrangement has been worked out which has led to some modifications of the methods of teaching languages in the Elementary School, and to a very large modification in the attitude of the High-School instructor; with the result that the children now get the advantage of the work which they have done in the Elementary School. There has been absolutely no loss or omission in their education, but there has been such a recognition of the good results of the work which they have done in the Elementary School that the High School can begin its work at a higher level. Credit, if one wishes to put it that way, for a year of high-school work, can with all propriety be allowed to these children. They have done the same work that is expected of others who begin the language in the Freshman year of the High School, and they are amply qualified to go on with the higher studies in these same fields.

The problem of dealing with mathematics is somewhat more difficult, and yet it is perfectly clear to all who have been interested in the problem of organizing mathematics in the elementary and high school that a very radical change needs to be made. The elementary school certainly has the right to include in its course a great deal more constructive geometry than has heretofore been common in the elementary course. The elementary school also has a right and duty to include some of the simpler algebraical methods of procedure. The use of the simple equation, the use of the unknown quantity, can readily be taught in the grammar grades, and the ease with which these devices make it possible to solve many problems that heretofore have been solved by cumbersome arithmetical methods justifies the introduction of algebra into the elementary-school course. Still the administrative difficulties of introducing geometry and algebra into the elementary school

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are very great. Last year the eighth grade of our Elementary School had progressed far enough in its work in arithmetic so that we felt justified in giving a part of the work which would ordinarily have been given in the first year of the High School.

As a result of all of the adjustments which I have described last year's eighth grade went from the Elementary School into the High School sufficiently advanced in its studies so that it could be classified as well through the first year of high-school work. The present eighth grade will go to the High School with even a larger portion of the first year's work absolved, and it is our expectation that the major part of the present seventh grade will be promoted directly into the first year of the High School. I say that a major portion of the present seventh grade will be so promoted, for it is not the intention of the school to send on children who are not qualified to do secondary work. There may be some members of the class who ought to take a longer period before they are brought to the kind of work which is ordinarily given in the high school.

One further interesting experiment is being made this year. The eighth-grade children are being offered an opportunity to take voluntarily, after the regular hours of school, some Latin work which is given to them without any requirement of home study. They are meeting one of the best Latin instructors that we have in the High School for a period each day, and with this teacher they are studying the elements of Latin.

I need hardly emphasize the importance of effecting economies of the type which have just been described, wherever such economies are possible. The pressure which is felt throughout our whole civilization for economy of time in education, certainly has commanded enough attention in recent years to be worthy of the closest attention on the part of teachers. If we can save a year of the time of elementary pupils, and bring them into the secondary school at a period a year earlier than is customary, we shall have helped to solve the urgent social question which confronts all educators.

I have illustrated my remarks by reference to our schools, but I believe the same general plan is coming in all schools. Elementary-school teachers are convinced from their experience that there is at

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some point in the elementary course a waste of time and energy. There is a great deal of undue reviewing in the seventh and the eighth grades. Teachers in the seventh grade review at the end of this year in the hope that their pupils may be better prepared to go on with the work of the eighth grade. At the beginning of the eighth grade there is a long and laborious review of what has been done before, and finally, at the end of the eighth grade, there is a long period of preparation for the work of the high school. All this reviewing is wasteful. There ought to be a continuous review of the work which the children have done in earlier years, by a constant revival in ordinary routine of the principles and information which have been acquired in the earlier years. There ought never to be the necessity of a long period of review, such as is too common in our schools at the present time.

I find support for the doctrine which I have been defending in the fact that such schools as those of Concord and Berlin, New Hampshire, are making an effort to differentiate sharply between the elementary school and the high school at the end of the sixth grade. These experiments exhibit a clear conviction that the seventh and eighth grades as now organized are not satisfactory. Furthermore, in personal conference with many teachers in these grades I find a widespread feeling that the reviewing to which reference was made above is not justified. It may be that the Concord plan is the best one. There are, however, two different issues involved in the matter. First, there is a matter of actual economy of time; the second problem is the problem of better organizing the work. The change in the schools of the University of Chicago cuts out one year by avoiding repetitions. No reorganization will be finally acceptable which does not do as much. It may be advantageous to have this or that form of organization in the seventh grade, but the general school course will hardly be adequate unless it has some form of work corresponding to the present seventh grade. In other words, there is content enough to justify without waste seven years. This content should be more effectively organized, but it is extremely doubtful whether the time should be reduced below seven years. The change in the Chicago school above described is not a change of radical reorganization, it is

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strictly a change effecting economy of time. The way is now open for readjustments in detail within the organization. The change which has thus far been made can be described as first of all efficient from the point of view of strict economy.

Thus far I have dealt with the problem of the high school and its extension downward. Let us turn now to the problem of extending the high school upward.

The discussion will, I believe, proceed from this point most clearly if I lay down a definite program of organization and attempt to defend this program. I am sorry not to be able to offer a concrete case where the program has been carried out, as I was able to do in dealing with the relation between high school and elementary school. The program which I wish to advocate is the fusion of the first two years of the college with the high school. The work which is now done in six years, that is, in four years of high school and two of college, can under proper organization be completed in five years. For convenience I shall speak of this five-year school as a secondary school.

It should be noted again that the subject of discussion at this point is economy of time. Assuming that no radical change is desirable in the general course to be followed by a student, there is a possibility of economical organization. The first year was saved between the elementary school and the high school; a second year can be saved between the high school and the college. When the waste in our present system is eliminated then we shall be in a position to work out readjustments of a broad type in the content of the course. The program which is now to be defended is a program of economy of one year between the high school and the college.

The first argument which I wish to present is somewhat indirect. Students who go to college under our present plan are often mentally and socially immature. The shock of readjustment is very great, and many a student loses much time and energy in the radical change in his habits of life and study. Society has recognized this fact and has attempted to make the adjustment as easy as possible for the immature student by keeping him for the first years of his college work as near home as possible. The most striking fact

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which has been brought out in recent investigations is that American colleges are local institutions. The colleges of the great universities are local and the small colleges are chiefly justified in their struggle for existence by the fact that they bring the advantages of a complete education to boys and girls who could not go far away to attend college. The defense is valid, because a local institution is likely to save the student from some of the dangers of readjustment. Why not extend the advantages now provided here and there to as wide a range of people as possible? If the local college does a service when it provides that a group shall enjoy under favorable conditions an extension of high-school training, why not make the advantages of such an extension accessible to all children through an enlargement of the local institution best fitted to carry on this work? Strong public high schools ready to do the work of the Freshman and Sophomore years are the right and duty of every community. They exist today in a form which calls for very little enlargement, in all the leading centers of population in this country.

It may be said that the plan which is proposed will only put off the day of readjustment. The student going from the enlarged high school will still be obliged to meet new and exacting conditions in the higher university to which he goes. True, there will have to be a readjustment, but it will be relatively easy because the student will be more mature and more fixed in habits of concentration. Furthermore, the later years of college work are more flexible and the adjustment will be easier because the student who elects his courses with some definite end in view will not have to repeat at the arbitrary demand of the Freshman instructor the English and the science and the history which are now regarded as necessary to complete a general education.

The second argument against our present organization is much more direct. Consider the educational waste and lack of co-ordination which is exhibited every year, when colleges admit students with conditions. A student admitted with conditions is a living evidence that secondary education is to be completed in the college under a system of instruction which is not frankly and fully organized for that purpose. A college which accepts such a student

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is saying something like this: "The subject in which you are not prepared is indeed stated in our catalogue to be a logical and necessary preliminary to our higher work, but we are a good deal in doubt about the truth of what is said in our catalogue. If you will consent to take the major risk, and let us remind you from time to time that you are probably unable to do our work, we will accept your tuition and admit you to our classes and undertake from now on to organize your course." It would be most wholesome for college faculties to go into the details of the cases of conditioned students. Sometimes the fact is that the conditioned boy is strong in mind and body. Perhaps he discovered in high school that he has a future. He will be an honored alumnus of any college that knows enough to let him in. Why talk about him as conditioned? Why not say frankly that his training of the secondary or general type is incomplete and frankly provide that he shall take first what he needs, namely, training of a secondary and general type? The trouble now is that we talk as though his secondary training were completed; we let him into the college family, and keep reminding him that his adoption is of doubtful legality and of uncertain wisdom.

Another type of conditioned student is he who is not strong in mind or body. He is let in and is told to make bricks without straw. He is known to be unequipped with the rudiments, and is confused and worn out. He must meet at the same time both the usual requirements of regular work, and also the requirements growing out of his unpassed entrance requirements. His confusion blossoms into mental chaos, and then our educational machine cuts him off. When will colleges realize that an inadequately prepared student, inadequately taken care of in his first year, and ejected with all the pomp and circumstance of a faculty vote, is an evidence of institutional imbecility rather than of student failure?

Third, I wish to suggest in several of the departments of instruction problems which grow out of our present lack of unity of organization. It is a very striking fact that a large number of students fail in high-school mathematics. I have some statistics from schools in the northern part of Illinois which I judge from many indications to be typical of high schools over the whole country,

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and these statistics show from 20 to 40 per cent of failures in algebra. The failures in this subject are out of all proportion to the failures in other subjects. Their meaning is perfectly clear. Algebra as taught does not belong where it is now put into the course of study. Yet it is almost impossible to get it moved, because tradition is so strong. Conversely, geometry has become fixed in the latter part of the high-school course. It belongs earlier. It got into its present form and into its present place on the program through its alliance with formal logic. The whole problem of mathematical instruction ought to be restudied with a free right and purpose on the part of those who teach it to move certain parts of this science up into the present college years, and put back part even into the elementary school.

As for language, some comments have already been made on this subject. It is the worst kind of educational folly to put the elements of any language which is to be taught for general purposes into the college course, and administer them from the point of view of philological science. If languages are to be acquired, they ought to be acquired at the very latest during the secondary period. They ought to be taught by people who will concern themselves with the study of proper methods and devices for teaching elementary language. In short, the colleges as now organized ought not to teach elementary languages. American students in Germany find that the whole matter of language instruction in that country is managed differently and more efficiently than we manage it here.

When it comes to the classics, one hesitates to offer any comment lest he should be regarded as intruding upon sacred ground. Greek teachers have nearly succeeded in arranging it so that there is little occasion to speak of that subject outside the Classical Association. Latin teachers are beginning to feel the pressure of the competition of the modern languages. Why doesn't someone who has the temerity to offer advice to these sometime autocrats of the high-school course suggest that Latin ought to begin earlier and ought to be made the key to all classical culture through the grafting on during the third and fourth year of enough Greek to give the ordinary student all that he wants of Greek, namely, an opportunity to know in a very introductory way what the language of

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Homer is like? This compromise with the common people is not unlikely to bring a few specialists to the further study of classics as in the good old days. Otherwise the failure of the classicists to apprehend the meaning of secondary education is likely to become a historical monument to the fate of those who do not understand their opportunity.

One might discuss the courses in history and science, showing how these subjects must be adapted to the needs of the non-specializing general student. But the limits of this paper make it advisable to turn at once to the problem of instruction in the practical arts and applied sciences. Vocational education is our great unsolved problem at the present time. There are some who rise up and tell us that we should solve this problem by organizing separate schools. These prophets of division tell us that there are among our people some who are to look forward only to the simpler activities of life. For these there must be some kind of retreat where the sound of the hammer and the loom may alone be heard, where the softer voices of history and science shall be inaudible in the midst of the real activities of industry. These divisionists seem to be in doubt about the date when the laborers are to be counted out and sent to their special training school, but on the whole the date which they set seems to coincide roughly with that of the beginning of secondary education. Is it not a pity that these specialists in industry should deprive some of the boys and girls who are to stay in the conventional high school of their natural right to apply knowledge with their own hands? I make no plea at this moment for the cultural education of the worker; I make a plea rather for the opportunities of application of knowledge for every learner. Let the higher institutions be the homes of that absorbing specialization which is, I believe, necessary for the development of science; but let secondary education be the sphere of general training in the facts of civilization, the facts of science, and no less in the applications of knowledge. I should give another year to the wise men and women who know how to study the needs of adolescent youths and maidens. I should say to the secondary teachers: Begin anew and work out without fear or favor the whole problem of general education. When our high schools

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are increasing in attendance at the rate of 100 per cent in a little more than a decade, that fact means that secondary education is a problem in itself. We cannot subordinate this problem to the single problem of advanced special study, either professional or industrial. If secondary education is a sphere of general education, to be organized in terms of its own conditioning requirements, then what is clearer than the conclusion that industry has a rightful place in every curriculum? He is narrow in his view who would specialize the institution because the individual must be trained to specialize. My contention is that the institution should be made comprehensive in order that it may guide the individual with large facilities at its command. In some quarters our higher institutions of learning made the mistake of specializing too highly. We have as a result today the spectacle of state after state trying to devise some machinery which will unite in productive harmony the agricultural college, the engineering school, and the schools of pure science. We have reached a period of rapid expansion of our secondary schools; can we not see broadly enough to organize these great institutions so that they shall comprehend all that belongs within a single scheme of secondary education? I believe we can and shall. The secondary school ought to reach down and take the child who is now wasting time in the eighth grade. It ought to expand so as to give instruction to the immature students who are now working in the first two years of college. It ought to render the whole organization so much more economical than it is now that time shall be saved for the student, while at the same time the course is greatly enriched. This new secondary school will solve many problems which have been waiting to be recognized. For example, children will be taught how to study, not told to go home and find out how to study. Children will be taught the value of books as sources of suggestions for real life. They will learn here that industry is both skill and applied science and that pure science is the first step toward practical life. One could go on mentioning other achievements which are sure to crown this new secondary school.

I dare say there are some who will not share my optimistic enthusiasm. They will say: How can people be expected to take

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on all this training? I pointed out above, you will remember, that with proper economy of organization the program can be carried out at most in seven years of elementary schooling and five of secondary. I should advocate if time permitted that vacations ought to be cut down and the school day lengthened. All this could be done if we put in some handwork and outdoor work to break the monotony of the present highly specialized program. We could have one-year courses and two-year courses for students of limited opportunity. The program which I have defended is not a plea for a limited organization, but rather a plea for a study of the whole broad field of secondary education. It is a program intended to overcome the difficulties which arise out of the fact that several different kinds of people are doing little parts of the work, and duplicating each other's efforts very unintelligently, quarreling about interests which are too vital to be left unadjusted, wasting that which is of the most value, namely, human energy and opportunity.

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THE SECOND YEAR OF A MODERN LANGUAGE[1]

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When our honored President, Professor Barnes, wrote me, a month or so ago, inviting me to speak to you about the work of the second year in the modern languages, I was not sure that my official position as state inspector might not make it inadvisable for me to discuss the work which I am called upon to supervise, especially since we are now in a period of transition and change from the old translation method to at least a modified form of the direct method. I finally decided to accept the kind invitation of your president in the spirit in which it was tendered, but I beg leave to imitate Maître Jacques of the *Avare*, who was, you remember, now *cocher*, now *cuisinier*. I should like to lay aside my character of coachman of the state modern-language coach, and assume the character of cook, or chef, though with no aspirations for the *cordon bleu*, and try to serve up to you a second-year course, fairly complete from the *hors-d'œuvres* to the *café noir!*

Perhaps I ought to say a few words to you about the first year's work, not because this subject was not adequately treated by Mr. Host at your last meeting, but merely to recall to your minds the main features of that excellent discussion by my esteemed colleague. You will remember that Mr. Host stressed heavily (1) drill in pronunciation and practice in oral reading, and (2) the acquisition of a rather large vocabulary of the most common words and phrases, together with an accurate and ready knowledge of the main facts of the grammar, i.e., declensions, conjugations, and applied syntax. For this purpose the ordinary grammar or lesson-book, in conjunction with an easy reader, serves admirably. There should be no attempt to imitate the European reformers, with their pre-grammatical stage, where no grammar is taught, nor yet in their inductive, or rather pseudo-inductive teaching of the

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grammar. That sort of thing is all well enough in German and French schools, where conditions make it advisable and insure its successful operation; it is, however, quite out of place in our short courses and under our peculiar conditions. What we want is a time-saver, and not a time-waster; and of all the spendthrifts the so-called inductive method is the worst. Where it can and should be used is in the second and third year, rather than in the first, after the fundamentals have been mastered; for the use of the inductive method is, strictly speaking, the province of the scholar rather than of the learner. What we wish, in our first-year course, is the speediest and most solid preparation for the reading of French and German; and for that, pronunciation, knowledge of forms, a fair vocabulary, and some notion of syntax are quite necessary. Where the great majority of our pupils take but two years of a modern language it seems to me little short of criminal to dawdle over the work in a pre-grammatical, propaedeutical, or pseudo-inductive course.

The first thing that I should do with a class that came to me in second-year German or French would be, if I had not taught the pupils in the first year, to find out what they are and what they know by giving a series of oral and written reviews, for a week or ten days, on the work of the first year. That would enable me to kill two or three birds with one stone. It would call fresh to the minds of the pupils the work of the first year; it would enable me to get a line on the pupils' character, mental and moral; it would adequately test the previous work of the pupils, and the teachers from whom they came. I should then know my pupils, and there can be no really good teaching without this preliminary knowledge. I should thereafter know what pupils I could teach *en masse*, as a class, and what pupils I should have to teach individually, both in class and after school-hours. Teachers should remember that it is as much their business in a democratic school system to minister to the needs of the one-hundredth sheep and the one-hundredth goat, and according to their individual needs, as it is to the ninety-and-nine good sheep; and it is quite as well to consider the number of the last-mentioned members of the school flock as very greatly exaggerated in the parable.

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Before beginning the work of the second year I should put squarely before me, in writing, if necessary, just what aim or aims I wished to attain for my pupils in scholarship and habit-formation and the best means of attaining this aim or these aims. Then, and then only, should I be in a position to judge my own work—to look upon it impersonally and call it good or bad. Yet it is surprising how few teachers do that. Most of them teach by pages, seeing only the limited day's work with the rays of a dark-lantern in the circumambient Egyptian blackness.

In the first place, the aim must be a good and worthy one, i.e., it must have an educational value, and a permanent educational value, and not merely an informational value. I do not consider that it is our business as teachers of modern languages to prepare boys to be waiters in cosmopolitan hotels and restaurants or interpreters in cosmopolitan police courts. Nor should we make it our business to teach them the trivial and superficial facts of the tourist's observation—that German men drink beer and smoke prodigiously, and that German women drink altogether too much coffee; that the Germans eat five times a day, or that butter does not appear on the table for dinner, etc., *ad nauseam*. At least one German reader contains about two hundred pages of just such insipid stuff. I have no patience with such hand-made products of the American tourist; at least not for use in the classroom. If *Realien* are to form a part of the instruction, let them be in the form of maps, pictures, anecdotes, etc., introduced at the proper psychological moment by the teacher. What I wish to put into the hands of my pupils is, not a guidebook or a tourist's book of anecdotes, but real literature; something, emanating from the imagination of a German or French author, to appeal to the imagination of my pupils. Do not misunderstand me: I do not mean the severe classical literature of the Lessing-Goethe-Schiller type, at this stage of the pupil's progress, but the simpler forms of literature. All that I ask is that they be simple, interesting, imaginative, and worth while in content. With this as my material I should aim to have my pupils read a lot, read intelligently and appreciatively, and acquire, through reading, the habit and the love of reading.

In the second place, no aim is practical unless it is practicable.

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I don't care how worthy and how ideally commendable your aim may be, if you cannot ordinarily attain it, you should discard it. How often I have listened with an almost vicious impatience to would-be reformers proclaiming as the aim of modern-language teaching "a speaking knowledge" of the language, and basing their argument upon their own experience when they went to Germany or France. As though more than one in five thousand of our pupils would ever see France or Germany! Again I must request that you do not misunderstand me: I am not arguing against oral work, not in the least. On the contrary, I am very much in favor of it; it is indispensable, psychologically and pedagogically, in right teaching. But that is vastly different from taking as the aim of our instruction "a speaking knowledge" of the language, and I make bold to say that if you fail to look upon this matter rightly your whole instruction will soon be vitiated. Keep the worthy and really attainable "reading knowledge" as the aim of your instruction, with a full realization of the psychological and pedagogical reasons for the oral work as an aid to the attainment of that aim, always in mind, and your method will follow as the night follows day. Speaking the language, hearing it spoken, explaining the text in the foreign tongue, etc., not only aid the memory very greatly by providing an extra vantage-point of association, but they alone give *Sprachgefühl* and make possible a higher and more delicate appreciation of the literature. I should advise, therefore, very strongly that the foreign language be, in the second year, the language of the classroom, not only for all the various activities of the teacher, such as the assignment of the lessons, commendation and criticism of work, commands, etc., but also for the interpretation of the text read.

I must confess that the trend of modern-language teaching in some quarters of the state would seem to indicate that translation was about to be abolished. In two teachers' meetings of the last six months I have heard it advocated that texts with vocabularies should go, and that dictionaries in one language be substituted. I think that it is a mistaken direction for reforming our modern-language work, and I prophesy that, if this direction is ever largely followed, it will end in a return to the old translation method; then

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we should be back where we have been for the last twenty or thirty years; I base this prophecy on an experience which I have had repeated in a number of schools. The following is a typical example. I visited recently an excellently prepared teacher of German, saw her teach, and tested her pupils in reading aloud and in conversation. Although she was, as I have said, very well prepared to do the kind of work which the state department is trying to put into effect, her pupils made a poor showing, and she quite frankly confessed that she had tried the direct method, but had felt obliged to give it up. She found, she said, that her pupils were not working, and that what they got in the classroom did not stick. She reminded me that Viëtor's famous pamphlet had as subtitle "Ein Beitrag zur Ueberbürdungsfrage," and that, while there might be a question of overwork in German schools, there never had been, and never could be, a question of overwork in American schools. On the contrary, our question always had been, and always would be, probably, how to get a fair measure of work out of our pupils. With the direct method, her pupils, she knew, were losing the advantages of good habit-formation, mental discipline, and training in English expression, which constitute the very definite and attainable results of the old method, and were not getting anything really worth while in either the ability to read intelligently or to speak the language accurately and fluently even in a limited circle of daily usage.

I have no doubt whatever that this teacher was right in her diagnosis, and I think that her case is typical; I disagree with her, however, in the remedy which she chose; she returned to the old translation method. That is not, in my opinion, the proper remedy. I believe the following statements to be absolutely true for modern-language teaching in American schools under existing conditions:

First: With the direct method pure and simple, without translation, we shall get nowhere, at least nowhere worth going.

Second: There will be little or no time for oral work (oral reading and conversation) if the daily reading-lesson is to be translated in the classroom; therefore

Third: We must banish from the classroom, but not from the course, translation into English (which can just as well be done at

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home), and keep for the classroom the oral work (oral reading and conversation), which cannot be done at home.

The problem that confronts us, then, is this: how shall we assure ourselves that the translation has been done, and well done, as home preparation, without actually doing the work over in the classroom? I should like to propose the following devices, which I have long made use of in my classes.

First: When I assign a reading-lesson, and after I have developed whatever needs explanation in it, I require my pupils to do three things: (*a*) read the French or German aloud at home; (*b*) translate the lesson into English, using vocabulary and notes; and (*c*) study the French or German with a view to answering in the foreign language questions in French or German upon the text (content and phraseology). When I call the roll the next day, the pupils must answer either *prepared* or *unprepared* on all three things (no part-preparation is considered); I therefore put them on their honor, as the first device for securing results of home study. I do not let it go at that, however, for the simple reason that I do not wish to train boys and girls to lie, but to tell the truth.

Second: I use the following checks upon the pupil's veracity: (*a*) I make use of test-words, phrases, and idioms, the translation of which I ask from the pupils whom I, for any reason, suspect; and here, of course, an intimate knowledge of the pupil's character is of paramount importance; (*b*) I judge from the pupil's oral reading of the text (expression, intonation, grouping of words) whether he understands the text or not; (*c*) the pupil's answer (in the foreign language) to my questions in the foreign language based upon the text is a valuable check upon the quality of his preparation; and lastly (*d*) I frequently give written translation-exercises in the classroom without notice, sometimes during the last ten minutes of the hour, at other times covering an entire period, with either the same pages for translation for all pupils, or with different pages for different groups of pupils, since it is quite desirable that a pupil remember the work that he has done in the past. Indeed, I know of a German inspector who insisted that there were only three types of question in testing the work of pupils and teachers: (1) on the day's lesson—to test daily prepara-

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tion; (2) on a passage chosen at random, which the pupils had done in the not too-remote past—to test thoroughness; and (3) on a passage not too far in advance—to test power.

I hate to think what would happen if we inspectors followed that method in our schools!

It is conceivable that one might object that the plan which I here propose puts all the work on the pupils and leaves nothing for the teacher to do; that objection, if it should be made, is neither just nor pertinent. In the first place, we have no *Ueberbürdungsfrage*, as I have said before; in the second place, it is the old translation method that is the line of least resistance for the teacher. She need but sit behind her desk and correct the pupil's translation; she nods and the others fall asleep. Besides, nothing that the teacher can ever do in the elementary course of a foreign language can possibly outweigh her function as a drillmaster; and the place to drill is in the classroom. In order to get time to drill she must not waste time in duplicating in the class work that can be done at home. She cannot drill her pupils by wireless, but she can make them study by wireless: by the force of her personality and the just—because uniform—strictness of her class-management. The function of the teacher as teacher, i.e., the imparting of information or the development of material for insight, should be evident just where it now is conspicuous by its absence, namely, in the assignment of lessons. Nearly all the teachers whose work I have inspected employ what I call the "fall-down-pick-me-up" method. They assign, for example, pages 22–23, and usually just when the bell for the passing of classes rings. Then, when the lesson is recited the next day, innumerable mistakes are made and carelessly corrected; that is, the pupils fall down and the teacher picks them up, only to repeat the process the next minute and every following minute. The only results of such recitations, so far as I can see, are that the pupils get into the habit of falling *gracefully* and the teacher of picking them up *patiently*—two doubtful virtues.

The place for the assignment is immediately after calling the roll. The advanced lesson should be read (in the foreign language) by the teacher—if necessary the pupils should repeat after every

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sentence is read. If the pupils are well trained, chorus reading may be practiced to advantage. Difficulties in pronunciation, or unusual meanings of words, or peculiarities of diction should be noted and explained—usually in the foreign languages. Here the teacher is really teaching, and such teaching gives her the right to demand that the pupils know their lesson the next day.

After the advanced lesson has been assigned and developed, I should like to see the following features of a reading-lesson uniformly followed:

First: The day's lesson should be read in the foreign language, either by individual pupils or in chorus. I have seen classes of fifty pupils read two pages of German in chorus, all pronouncing—and pronouncing well! with proper intonation and expression—as one man. To attain such results, the teacher must have a quick ear to detect individual mistakes, and she must have rigid control of her class, to get all pupils absolutely in tact, without any levity, shirking, fooling, or incompetency, because one refractory pupil can spoil an entire class for this kind of work. By this reading the content and phraseology of the lesson is brought fresh to the pupils' minds.

Second: Translations of key-words or phrases, and explanations (in the foreign language) of work explained by the teacher the day before may well be in order now, the books still being open. Then

Third: Question- and answer-drill (in the foreign language), the books being closed. This work should be rapid and effective. No mispronunciations or wrong forms or endings should pass unnoticed, however. The teacher must get the right answer from the pupil and then sledge-hammer it into all the pupils *en masse*. The printed questions in the text should not be used for this work; that is like throwing a cold-blanket over the conversation; it becomes forced, unnatural, and besides does not really furnish aural training, since the pupils will have, in part, an eye-memory of these questions. The place for these printed questions is in the next and last feature of the daily programme, namely

Fourth: Written work. Some pupils should be sent to the board to write summaries of the work which has just been discussed orally; others, at their seats, answer in writing the printed questions

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of the text. The teacher need not and should not (ordinarily) correct this paper work, though she should look it over to note the general character of the work and mark approximately. The work on the board should, however, be corrected in class, and the teacher should gauge her time accordingly. Sometimes dictation or written translation or translation from hearing might well take the place of the work under the above heading, but, at all events, it should be written work. I consider that point vital, as it is the most reliable means of controlling the other work. It "shows the pupils up" as nothing else can, and if we do not make use of it constantly we shall be training illiterates and our oral work will no longer be within the province of true education.

Having outlined the aim, the method, and some devices of the teacher's technique, I should like to say a few words about some things that I have noted in my inspection and which I should like to make the basis of warnings. The first of these is the use of the classics in the elementary course. There are still many schools reading *Wilhelm Tell*, *Minna von Barnhelm*, and *Hermann und Dorothea* in the second year. I think it much the wiser course to leave the classics for the third year, and even then not to have the whole third year taken up with them. For the second year certain well-defined principles should guide you in the choice of reading-texts. Now I do not propose to recommend textbooks, and I wish that the Committee of Twelve had not done so. For the second year the texts should be (1) narrative, rather than descriptive or dramatic (in order to afford the largest amount of conversational drill), and prose rather than poetry; (2) they should be typically German, rather than alien in characters and scenes to German life; (3) they should come within the sphere of interests of the pupils for whom they are chosen; should be rather easy, simple, imaginative, and modern.

Such general principles would exclude many of the texts now used by teachers of German and French, and, to my mind, rightly exclude them.

The second point that I wish to make is the puerility, triviality, and complete isolation from the other phases of the work shown in much of the so-called conversation in the classroom. In going

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about the state nothing has so struck my attention as the idea of teachers that modern-language instruction is composed of water-tight, air-tight compartments, such as: (1) grammar, (*a*) forms, (*b*) syntax; (2) translation, (*a*) into English, (*b*) from English; (3) conversation. Almost invariably they arrange their weekly lesson-plan for the second year as follows: reading and translation, three days a week; grammar, two days; conversation, the last five or ten minutes of every reading-lesson, or a separate day is assigned for it, thus leaving two days for reading and translation. Time and again I have visited schools, only to have the teacher tell me: This is our grammar day; or, This is our translation day. Then, since it is my business to find out what I can about the teacher's oral work, I ask her if she can have some conversation. Yes, she is quite willing. And then something like the following takes place.

Teacher: "Was hast du heute morgen gegessen?"

Pupil: "Ich habe gegessen Milch und Brot und Schredded Wheat."

The teacher corrects the word order, but she has to leave the shredded wheat, because no one knows what that is in German. Then a few more questions are asked, such as, "Was siehst du aus dem Fenster?" or, "Was habe ich in der Hand?" I have two serious objections to this kind of conversation: in the first place, it is isolated, absolutely severed from all relation either to the reading or to grammatical instruction; in the second place, it is regarded by the pupils as a kind of play; it is not serious; it is amusement, pure and simple. You can easily see that, thus disconnected, it lacks naturalness, spontaneity; it is lugged in by the horns.

When I ask the teachers if they have no conversation based upon the text, they answer readily in the affirmative. I should like to hear some of that, I say. Then—a sad result of our last examination, perhaps—they say to their pupils: "Steigern Sie *gern;*" "Konjugieren Sie *mögen* im Präsens des Konjunktivs," etc., or, "Was ist die Syntax von *gehen* in diesem Satz?"

Now I am not here, or anywhere, to make fun of things, but to try to have teachers get a certain point of view. The kinds of

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questions that I have just noted would be all right if they were a direct and immediate outcome of the study of the text, where alone they have their *raison d'être*, where they have all the elements of naturalness and spontaneity. The time to ask for the present tense of *mögen*, subjunctive mood, is when a pupil has used the wrong form in his answer to a certain question. The time to ask what a pupil has eaten for breakfast or for dinner is when someone eats breakfast or dinner in the text which is being read; the time to talk about the trees and hills which one sees from the window of the schoolroom is when, in the text, it is a question of the landscape.

Let me illustrate. Suppose that our text is *Immensee*. The very first page gives a half-dozen different topics for discussion, all of which should be completed by the teacher. Among these topics are: (1) the weather and the seasons: *es ist ein Sommernachmittag, oder Nachmittag im Herbst;* the time of day comes in naturally, in addition to *Sonnenuntergang*, which suggests *Sonnenaufgang*, with drill on the verbs *aufgehen* and *untergehen*. If this kind of *lebendige Grammatik* is made use of, teachers and pupils will not say, as was actually said in one class which I visited in the northern part of the state: "Ich gehe auf, du gehst auf, er geht auf," etc.

In the second place, elementary ideas of the geography of Germany may be attained, if, as there should be, there is a map of Germany in the room. We are told that the old man spoke "mit einem etwas südlichen Akzent." Pupils can be told about some general differences between the North and South German speech, such as the detestable South German bilabial *w*, the tendency to make all stops into spirants and all spirants into stops, so that *gehen* sounds like *kehen* and *kehren* sounds like *gehren*, and such a simple word as *guchen* is written with both *g* and *k*. Things of such a nature brought up and riveted onto the reading lesson will never be forgotten, simply because they are taught in accordance with well-known psychological laws; they alone give life and interest to otherwise dead facts.

In the third place, there is a description of a typical *altdeutsches* house, the house-door, with its *Guckfenster*, the vestibule, the stairs, the *alte Haushälterin*, the study-room of Reinhardt, with its book-shelves and vases, the center table and *Lehnstuhl*,

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the pictures on the wall, etc. How easy to bring into this scene the different rooms, *Küche*, *Wohnzimmer*, *Schlafzimmer*, *Stube und Kammer*, everything except the *Badezimmer*; and that can be introduced in contrasting such a house with a home in America.

This is merely an illustration, taken from one page of *Immensee;* it will serve for almost any good text. Every phase of life, from the games of children to the professions of men, even to the collection of folk-songs as a hobby, can be illustrated from *Immensee;* from the building of a house, the making of a bench, the composition of fairy tales, the life of a university student, the occupations of a gentleman-farmer, walking, running, swimming, flowers, including water-lilies, even symbolism, etc., *ad infinitum:* everything is there, if the teacher only has (1) a little imagination, (2) a little versatility, (3) a little knowledge of German language and life. And of course the same thing is true of many French texts.

Of course there must be some control of this oral work, if the pupils are to spell their words correctly. What I always have done, practically ever since I began teaching, is to make large use of the mimeograph. Such connected vocabularies can be run off on the mimeograph in a very short time and given to the pupils for review at home. There is no book that contains them in a satisfactory manner. Many such books have been written, but they are not connected with real literature, and hence are mere word-lists, dry as dust, and *geisttötend*, or they are embodied in insipid, wooden dialogues, which the pupils read first, thus getting first an eye-memory rather than an ear-memory and therefore defeating their chief aim. Personally I have no patience with these wooden dialogue-books;—wherever they are in use, the only thing that is ever done with them is to read them, with perhaps a little brute-memorizing of parts of them. The very essence of conversation and of the oral method is the unexpected, the spontaneous: the hearing of words and sentences which have not been seen and learned beforehand in the form in which they are used.

Now what about grammar? Teachers say sometimes: I cannot do that kind of work because the Regents lay so much stress upon grammar (or it may be translation). Either statement is absolutely without foundation. Teachers make them either

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because they have not tried this method, or because they are incapable of following it. The method presupposes either a thoroughly independent command of the language, or very serious preparation, on the part of the teacher, of every lesson. When I first began to teach, I used to think out, or write out, fifty or seventy-five questions on the text, designed to bring out the form and content of the lesson to be read. I say form and content, because the form is important. I do not mean here questions of style, but merely sentence-structure and phraseology. A large part of my questions are grammar questions, that is, not the type mentioned above, "Steigern Sie," "Konjugieren Sie," etc., of simple forms, but their use in complete sentences. But the chief value of the conversational method in teaching grammar is the pupil's application of grammar in his answers. He uses the wrong case after a preposition: the teacher must get the right form out of him in the first place, and then pound in that knowledge for the whole class by the rapid use, with objects if convenient, of a half-dozen illustrations. Thus the pupil's vague, hazy, theoretic grammar-knowledge passes over into actual use until it becomes, at least in certain forms and expressions, automatic.

I suppose that some teachers will say that I am offending against my own test of a good aim by expecting too much of the average teacher, especially in the smaller schools. It is true, there are very many teachers of French and German who are lamentably deficient in scholarship and pedagogic technique, but the work here proposed is not for that reason impracticable. I know that many of these teachers are now eagerly reading books on method, are planning to take summer courses, or to go abroad for the vacation, or longer. Within a few years, no doubt, the general level of modern-language teaching in the state will be very appreciably raised. There are only a few, a very few, teachers who are beyond hope: those who have grown gray in the old method and whose speech-organs, in so far as possibility of change is concerned, are already affected with *rigor mortis*. They deserve all honor from you and from me, but they will, and they should, stick to the old translation method and not try to pour new wine into old bottles.

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THE HILLEGAS-THORNDIKE SCALE FOR MEASUREMENT OF QUALITY IN ENGLISH COMPOSITION BY YOUNG PEOPLE

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A scale for measuring the merit of English composition by young people, prepared by Professors Hillegas and Thorndike of Teachers College, is given in Professor Thorndike's recent book, *Education*.[1] The method employed in deriving the scale is given in detail in a recent number of the *Teachers College Record*.[2] Some seven thousand compositions of young people were divided into ten classes, each roughly representing the same degree of excellence. From these classes seventy-five samples were selected. To these were added artificial samples of poorer quality than could be found in actual school work, in order to fill in the lower ranges of the proposed scale. All together the set consisted of eighty-three samples which varied from the poorest to the best by small degrees of quality. About one hundred individuals arranged these samples in the order of their excellence. From the judgments of these individuals a smaller group of twenty-seven samples was selected as containing all the important steps in quality from the poorest to the best. Two other samples were added as the investigation proceeded, to fill in gaps in the scale. Five hundred and two individuals judged these sets of samples and on the basis of their judgments the scale was derived by the method of right and wrong cases.[3] The theory of this method as applied to this study is stated as follows: "Differences that are equally often noticed are equal, unless the differences are either always or never noticed." The zero point in the scale was located by the combined judgment of twenty-eight individuals, nine of whom were "men of special

[1] Edward L. Thorndike, *Education*, The Macmillan Co., pp. 214–19.

[2] Milo B. Hillegas, Ph.D., "A Scale for the Measurement of Quality in English Composition by Young People," *Teachers College Record*, September, 1912, pp. 1–54.

[3] Fullerton and Cattel, *On the Perception of Small Differences*, p. 12.

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literary ability," eleven "gifted teachers familiar with secondary education," and eight "psychologists familiar with the significance of scales and zero points in the case of intellectual abilities and products." The scale as finally formed represents the combined judgments of five hundred and fifteen individuals who read in whole or in part the material from which the scale was finally selected. The scale is as follows:

0

DEAR SIR: I write to say that it aint a square deal Schools is I say they is I went to a school. red and gree green and brown aint it hito bit I say he don't know his business not today nor yeaterday and you know it and I want Jennie to get me out.

18

the book I refer to read is Ichabod Crane, it is an grate book and I like to rede it. Ichabod Crame was a man and a man wrote a book and it is called Ichabod Crane i like it because the man called it ichabod crane when I read it for it is such a great book.

26

Advantage evils are things of tyrrany and there are many advantage evils One thing is that when they opress the people they suffer awful I think it is a terrible thing when they say that you can be hanged down or trodden down without mercy and the tyrrany does what they want there was tyrans in the revolutionary war and so they throwed off the yok.

37. SULLA AS A TYRANT

When Sulla came back from his conquest Marius had put himself consul so sulla with the army he had with him in his conquest seized the government from Marius and put himself in consul and had a list of his enemys printy and the men whoes names were on this list we beheaded.

47. DE QUINCY

First: De Quincys mother was a beautiful women and through her De-Quincy inhereted much of his genius.

His running away from school enfluenced him much as he roamed through the woods, valleys and his mind became very meditative.

The greatest enfluence of De Quincy's life was the opium habit. If it was not for this habit it is doubtful whether we would now be reading his writings.

His companions during his college course and even before that time were great enfluences. The surroundings of De Quincy were enfluences. Not

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only De Quincy's habit of opium but other habits which were peculiar to his life.

His marriage to the woman which he did not especially care for.

The many well educated and noteworthy friends of De Quincy.

58. Fluellen

The passages given show the following characteristic of Fluellen: his inclination to brag, his professed knowledge of History, his complaining character, his great patriotism, pride of his leader, admired honesty, revengeful, love of fun and punishment of those who deserve it.

67. Ichabod Crane

Ichabod Crane was a schoolmaster in a place called Sleepy Hollow. He was tall and slim with broad shoulders, long arms that dangled far below his coat sleeves. His feet looked as if they might easily have been used for shovels. His nose was long and his entire frame was most loosely hung together.

77. Going Down with Victory

As we road down Lombard Street, we saw flags waving from nearly every window. I surely felt proud that day to be the driver of the gaily decorated coach. Again and again we were cheered as we drove slowly to the postmasters, to await the coming of his majestie's mail. There wasn't one of the gaily bedecked coaches that could have compared with ours, in my estimation. So with waving flags and fluttering hearts we waited for the coming of the mail and the expected tidings of victory.

When at last it did arrive the postmaster began to quickly sort the bundles, we waited anxiously. Immediately upon receiving our bundles, I lashed the horses and they responded with a jump. Out into the country we drove at reckless speed—everywhere spreading like wildfire the news, "Victory"! The exileration that we all felt was shared with the horses. Up and down grade and over bridges, we drove at breakneck speed and spreading the news at every hamlet with that one cry "Victory"! When at last we were back home again, it was with the hope that we should have another ride some day with "Victory".

83. Venus of Melos

In looking at this statue we think, not of wisdom, or power, or force, but just of beauty. She stands resting the weight of her body on one foot, and advancing the other (left) with knee bent. The posture causes the figure to sway slightly to one side, describing a fine curved line. The lower limbs are draped but the upper part of the body is uncovered. (The unfortunate loss of the statute's arms prevents a positive knowledge of its original attitude.) The eyes are partly closed, having something of a dreamy langour. The nost is perfectly cut, the mouth and chin are moulded in adorable curves.

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Yet to say that every feature is of faultless perfection is but cold praise. No analysis can convey the sense of her peerless beauty.

93. A Foreigner's Tribute to Joan of Arc

Joan of Arc, worn out by the suffering that was thrust upon her, nevertheless appeared with a brave mien before the Bishop of Beauvais. She knew, had always known that she must die when her mission was fulfilled and death held no terrors for her. To all the bishop's questions she answered firmly and without hesitation. The bishop failed to confuse her and at last condemned her to death for heresy, bidding her recant if she would live. She refused and was lead to prison, from there to death.

While the flames were writhing around her she bade the old bishop who stood by her to move away or he would be injured. Her last thought was of others and De Quincy says, that recant was no more in her mind than on her lips. She died as she lived, with a prayer on her lips and listening to the voices that had whispered to her so often.

The heroism of Joan of Arc was wonderful. We do not know what form her great patriotism took or how far it really led her. She spoke of hearing voices and of seeing visions. We only know that she resolved to save her country, knowing though she did so, it would cost her her life. Yet she never hesitated. She was uneducated save for the lessons taught her by nature. Yet she led armies and crowned the dauphin, king of France. She was only a girl, yet she could silence a great bishop by words that came from her heart and from her faith. She was only a woman, yet she could die as bravely as any martyr who had gone before.

The figures above each selection in the scale represent its exact value in units of the scale extending from 0 to 93. Quality 37 ("Sulla as a Tyrant") is understood to differ from quality 47 ("De Quincy") by exactly the same amount as quality 67 ("Ichabod Crane") differs from quality 77 ("Going Down with Victory"); and quality 93 ("Venus of Melos") is understood to be just one point less than twice as good as quality 47. Professor Thorndike says:[1] "By using such scales, the absolute gain which any pupil made in any year could be measured in the same way as his gain in height, weight, wages, or pulse rate, and the results of different means and methods of teaching could be demonstrated with exactitude instead of being guessed at."

There can be no doubt of the importance of securing definite standards for the measurement of school products in place of the indefinite and widely varying standards employed in different

[1] *Education*, p. 214.

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schools and by different teachers in the same school. Neither can there be any doubt regarding the elaborate pains with which this scale for the measurement of English composition has been derived. However, one who examines this scale can hardly fail at first to be skeptical regarding its practical availability for measuring the merit of so highly complex a product as the composition of young people in their teens; and those who are accustomed to scoff at the idea of a science of education will doubtless find material for ridicule in the claims made by its authors for the exactness with which this scale may be used.

For the purpose of a practical test, the author of this article submitted eight selections taken from the actual compositions of high-school pupils to forty-two teachers of English composition in a number of high schools, normal schools, and colleges, all of sufficiently high standing to make their judgments worthy of respect. The selections were also submitted to two other groups of judges, one consisting of five teachers of English in the University High School, in which an effort has been made for some time to secure uniform standards of grading; the other consisting of a class of sixteen graduate students taking a course in the statistical study of school materials in the School of Education in the University of Chicago. With the material to be graded was submitted to each a copy of the Hillegas-Thorndike scale and they were asked to grade the material carefully according to the scale and to submit their results without consultation with each other. It is probably fair to assume that these individuals were as competent to apply the scale as the average persons who could be expected to apply it in actual practice.

The material furnishing the basis of the test is given below, the different selections being designated by the letters A–H. It perhaps should be stated that selections A and B were written by members of an industrial class who had completed only six grades in an elementary school.

A

Football. The place was 50×100 ft, and there was a ten boys playing F. B. our captain was Kelley and the score was 26 to 0. Its a very interesting game because it makes the man helty.

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I like to play Football or baace Ball. But I dont know how to play eather one I like to learn it.

B

The boys call out at one time, we want to play football. One boy hollars captain on one side. The game is started, and I am afraid I will get hurth. All at once I see the boys running I run to I jump on one boy. I get a goo and tight grip, and I was down on the ground.

C

Anyone trying for this Rhodes scholarship must comply to three rules. The applicant must have had two years in some college of good standing must be unmarried, and must be between nineteen and twenty one years of age.

"The rules seem quite easy for a scholarship, don't you think so girls?" asked Marion.

"Yes, but then it is not so easy as you think because there are many other applicants," replied Helen, "But continue."

Then, Mr. Porter told us about Oxford. There are twenty one colleges at Oxford, but they are shut in by a high wall and are separated from each other.

"Why! I thought Oxford contained just one large college instead of twenty-one," said Helen.

"Yes, I replied and there are a good many other things which greatly surprised me.

D

When one has a class on the third floor of Blaine Hall and one on the third floor of Belfield Hall the hour following, the five minutes allowed between classes does not make it possible for him to reach his other class on time. Now, when he is absent one day and stops the following day, after class to find out when he may make up his missed lesson he arrives at his next class late. Then perhaps, the teacher has some point she wishes to explain to him, and so retains him a moment. Maybe his locker combination will not work, or perhaps he drops his books, the result is the same in each case, he is late to class. He reaches the class room, five minutes late. He rushes in panting. For who wouldn't be breathless after running up three flights of stairs? As he enters he is confronted with "why are you late?"

To which he pants out. "Third floor of Blaine, couldn't help it."

E

Of the many points which should be taken into consideration in choosing a college, one of the most important is that of the size of the institution. I am of the opinion that it should be rather small; that is, with an undergraduate body of about two hundred and fifty students. There are a number of reasons for this. In the first place, in a small college like this, a student who has exceptional powers in any branch of interests has more opportunity to come to the fore, and make the most of himself. For example, if a man is an unusu-

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ally good runner, although he does not know it, and has not been well-developed, if he is in a small college, he is more likely to go out for track and find out what he can do, than if he is in a large university, discouraged by the great number of athletes around him who are, as this student thinks, so much better than he. Thus he does not try himself out, and some excellent material is wasted. If he had been in a smaller college, he would have tried himself out, and would have developed into a runner worth while, and would have done both himself and his Alma Mater good. On the other hand, if a man is exceptionally bright, and good at his studies, if he is in a smaller college, he will have more opportunity for the individual attention of the instructors, than if he were in a large university, where, besides being distracted from his work by the multifarious interests of a large institution he is prevented from close contact with the professors who have to teach large classes and are hindered from much outside help of the students by the excessive burdens of administrative work.

F

That night, we took dinner at the hotel and, as we were not over anxious to return to scene of destruction, a bunch of us stayed at the hotel the great part of the evening. When we finally did return, we talked and chattered freely as long as we were on the regular hotel walk, but when we turned off on our path through the woods, a sad silence descended upon us. Each of us felt a peculiar fear and gloom. As we came to the place where we turned, we stopped a few minutes, knowing that we would see no welcoming lights nor hear the pleasant noise of talking. When we turned, we saw the ruins bathed in a flood of most beautiful moonlight. The moonshine vied with the strange phosphorescent glow of the ruins, themselves, in making the scene wierd, and terrible. Two men kept watch through the long night, lest the fire break out, again. The next day, with sad hearts, we left the mournful ruins for the more cheerful, if less beloved, city of Chicago.

G

Down the trail to the beach we stumbled, our only illumination the little lamp, and went along the shore, very silently, for each one was too much occupied in shivering to say anything except muttered ejaculations when he stubbed his numbed toe against a rock. Soon, however, we came out on the road, where the footing was much smoother, and here we quickened our pace. After half an hour of pretty steady climbing, we emerged from the woods, and struck a little footpath, which led across the rocky pasture land where we really began to feel the cold. The grass was heavy with the first frost, and by the time we had gone a hundred yards, our legs from the knees down were thoroughly drenched with ice-water. But by this time, most of the journey was over, the light of dawn was crawling over the sky, the clear, cheerful call of a white-throated sparrow floated down from a fir nearby, and we really began to think that early morning was a pretty good time of day, after all.

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H

Here are the lockers where we kept our books. I wonder if I could open any of them. Here is the one I had during my last year in high school. I wonder who is its owner now. How does it look, in the interior. She and I kept our many belongings within, sometimes in good order, and sometimes, just before a wild and thorough cleaning, in a state of peculiar confusion. I did not like to clean it, then, but how I should enjoy going through it from top to bottom, now, and arranging the books, hers and mine, in neat rows! I try my old combination, but the locker will not open. Here is the other locker. There were four of us, in those days. The interior of this other locker used to be arranged much as ours. I wonder if the owners of these two lockers are as good friends as we four were.

The following tables give the essential features of the results obtained from the gradings of the three groups, showing the lowest grade given to each selection by a member of each group, the highest grade, the maximum variation, the average grade, and the average variation of each individual from the average grade of the entire group.

FORTY-TWO TEACHERS OF ENGLISH COMPOSITION IN HIGH SCHOOLS, COLLEGES, AND NORMAL SCHOOLS

Specimen	Lowest Grade	Highest Grade	Maximum Variation	Average Grade	Average Variation from Average Grade
A	0	40	40	17	8
B	0	47	47	20	8
C	35	86	51	53	11
D	47	85	38	71	8
E	45	100	55	85	8
F	40	93	53	75	8
G	67	97	30	84	7
H	26	95	69	80	11

SIXTEEN MEMBERS OF GRADUATE CLASS IN EDUCATIONAL TESTS. SCHOOL OF EDUCATION

Specimen	Lowest Grade	Highest Grade	Maximum Variation	Average Grade	Average Variation from Average Grade
A	15	47	32	28	11
B	18	37	19	28	6
C	26	83	57	59	15
D	38	93	55	71	13
E	32	95	63	74	8
F	65	90	25	77	6
G	67	94	27	81	7
H	47	93	46	80	11

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FIVE TEACHERS IN THE ENGLISH DEPARTMENT OF THE UNIVERSITY HIGH SCHOOL

Specimen	Lowest Grade	Highest Grade	Maximum Variation	Average Grade	Average Variation from Average Grade
A.....	12	30	18	19	5
B.....	12	42	30	27	7
C.....	47	67	20	60	11
D.....	57	80	23	71	11
E.....	75	100	25	85	5
F.....	64	87	23	77	5
G.....	77	97	20	86	6
H.....	75	95	20	88	7

From this application to school material at least two criticisms of the scale may be made:

1. The scale represents the composite judgment of some five hundred individuals more or less expert as teachers of English, writers, and experts in fields that render their individual judgments worthy of respect. But the scale represents the judgment of no single individual, and the judgment of any single individual or of any group of individuals whose judgment entered into the formation of the scale such as might reasonably be expected to apply the scale to any large body of material necessary to an adequate practical test would not represent the aggregate judgment of those whose arrangement of the material formed the basis of the scale. These individuals varied widely in their judgments, placing the various selections in rather widely varying positions in the scale. But the scale cannot be used in practice by all the persons whose judgments contributed to its formation. It must be used by an individual or by a small group of individuals whose judgments may be expected to vary as widely as did those in the making of the scale. As there is no such person as the average pupil, so there is no average judgment which can be applied to a test of school products. This of course could be said of any similar test to be applied to school products and furnishes in itself no adequate reason for the rejection of this scale. It is, however, a more serious objection in the case of the composition scale because of the highly complex nature of the material to which it must be applied.

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2. A more serious objection to this particular scale may be made on the ground that the material employed is not representative. In estimating the value of written composition there are two elements that may roughly be said to be of about equal value—form and content. By form we would mean such elements as correctness or freedom from mistakes of spelling, punctuation, capitalization, syntax; neatness and general good appearance; effective and pleasing sentence structure; organization of material in logically coherent units. A scale for evaluating these elements might be applied with reasonable accuracy and for this purpose the present scale may perhaps be regarded as an excellent one. By content we would mean the quality of the thought, feeling, artistic skill, effectiveness, and originality of expression. As a basis for evaluating this important element, the scale seems to be entirely inadequate. Every selection in the scale that has any thought-content at all is on a subject exceedingly formal, drawn from history or most often from readings in literature. An exception might be made of the scale number 83, "Venus of Melos," which may have been written by one who had seen a reproduction of the statue, but quite as likely by one who had read a description of the statue. One who reads the scale carefully might assume that for some reason all material involving any originality of thought had been carefully excluded. It cannot be supposed that composition subjects in any school were chosen exclusively from such a barren field as is represented by the material in this scale. Certainly no school should be expected to furnish any large amount of material on subjects so far removed from all present-day human experience. It is altogether impossible to compare compositions on subjects that offer opportunity for originality of thought and expression with the formal material found in the scale which depends for its content largely upon the memory of books read or discussed in class. The scale differs in kind from the material to be measured. It is like using a yardstick to determine the weight of material in the physical laboratory.

Good illustrations of this essential difference between the scale and the material graded may be found by a comparison of a few of the selections graded with that part of the scale to which

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the average grade assigned makes them most nearly equal. Selection B is given an average quality 18 in the scale. While very crude in form, it will be observed to have a certain vividness and unity of form which the corresponding selection in the scale does not possess. The wide variations in the grading of this selection are doubtless due to the difficulty which the judges experienced in making an exact comparison of material so essentially different in content. The most marked variation occurred in the grading of selection H, in which some judges distinguished a certain fine feeling which influenced the style and gave it unity while one who gave it a very low grade evidently did not observe this excellence at all. From this inherent difficulty in measuring two such dissimilar elements as form and content in written composition, one might suggest the desirability of two scales for the determination of the value of these two elements.

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A PLEA FOR OUT-OF-DOOR ZOÖLOGY

WALTER L. HAHN
St. Paul Island, Bering Sea

A practical knowledge of field zoölogy was a necessity for savage man. We may even go beyond this—it was necessary for the prehuman ancestors of man. Neither could have existed without knowing the habits and haunts of friends and foes.

With the beginning of city life the necessity for this knowledge ceased among a large part of the human race. At the present time a close acquaintance with wild forms of animate nature is limited to the naturalist, professional or amateur, the sportsman, and in some degree, the farmer.

Among professional zoölogists, knowledge of living animals in their native haunts is often slight. Indeed, there is a group of zoölogists who deride the study of higher forms of animals under natural conditions as "vague," "unscientific," and "worthless." It is undeniable that such studies are often vague and unsatisfactory, for they are often extremely difficult. Worthless they cannot be if they are extensive and made with care and understanding. For the final test of every biological theory is, "Will it work when applied to the living creature?"

Perhaps I should state that my plea is intended for the student rather than the teacher. The out-of-doors would be the ideal place to teach zoölogy under ideal conditions. In a school where the subject is sandwiched in between the rest of the curriculum, where classes are large, and where there is only a limited daily period in which it can be taught, the teacher must weigh the discipline of the laboratory against the interest of the field; and the former will usually preponderate.

I also desire that nothing that I may say here shall be understood as a disparagement of the microscopist, the experimentalist or the systematist whose work is chiefly indoors. They have contributed much to our understanding of the great general prob-

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lems of heredity, evolution, and development, as well as to preventive medicine and various other intensely practical questions.

To accomplish anything in the way of microscopical and experimental research it is necessary to have microscopes, reagents, and various other forms of expensive laboratory apparatus, as well as a thorough knowledge of technique, and sufficient time for long and close application. Systematic research, at the present time, requires access to large collections which must be well arranged and well housed. Nor can much be done in the way of systematic study without a very considerable library containing rare and expensive books.

The equipment for the study of zoölogy out of doors is far less expensive. This does not mean that books are unnecessary or that a small amount of knowledge will suffice. In no branch of science is there more need for keener perceptions, better judgment, and wider scope of information than in the study of living animals. But the monetary outlay needed for such study is very small, and the opportunity is open to everyone who has frequent access to a bit of woodland, pond, lake, or stream. And if he fails to accomplish much in the way of research he will at least have healthful recreation and a great deal of genuine pleasure.

It is not the purpose of this paper to enter into the technique of collecting specimens for museum purposes, although this has been, and still is, one of the most important lines of field work in zoölogy. Information on methods of collecting and preserving can be obtained from the National Museum, the Department of Agriculture, or in various books that are on the market. Neither do I enter a plea for studies that shall be made exclusively in the open, unchecked by observations in the laboratory or by familiarity with the work of others along the same line.

The study of living animals may be carried on along three general lines: the development and growth of the individual (ontogeny); habits, instincts, and senses (psychology); relation to the environment (ecology). It is not often desirable to make a sharp distinction between these different lines of investigation when we are making a study of living species of the fauna of a given area, and no such distinction will be made here.

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The life of any animal might be considered under the following heads:

The span of life: Development, including changes in appearance with growth; age attained under normal conditions; condition of life during old age.

Breeding habits: Age at which the reproductive functions became active; secondary sexual characters; number of offspring; season when offspring are born; period of gestation; care of young by parents; number of mates during the lifetime of the animal; site of home; character of nest if any is made.

Food: Kinds preferred; kinds available that are sometimes eaten; quantity necessary; quantity available in a given area.

General activities: Does the animal hibernate? If so, how long? Is hibernation affected by the weather? Range of the individual in one day, and during its lifetime.

Mental traits: Cunning; adaptability; teachability.

Senses: General development; senses used in procuring food, in recognizing mates, in finding the way home.

Enemies: Kinds; number.

Relation to physical environment: Effect of weather; of severe droughts; floods; severe cold; unusual heat.

The above list is merely a suggestive outline; yet all of the topics included in it have not been carefully studied for a single wild animal, and there is hardly one of these points that has been carefully studied for some of our commonest species.

It would not be necessary to discuss in detail the methods of studying each of these problems, even if I were competent to do so, but it may be worth while to suggest a few problems more specifically and indicate some methods of investigation in this field.

Much can be learned about an animal by keeping it in captivity under conditions that are as nearly as possible like its natural surroundings. Even under the best of artificial conditions it is necessary to make some allowance for abnormal changes in behavior due to changes in environment, and every study of a captive animal should be checked as far as possible by observation of its unconfined relatives.

If a captive animal has room for exercise and becomes sufficiently accustomed to its surroundings to eat well, it is reasonable to assume that its appetite will remain normal. It is easily possible to measure its food and to determine its food preferences by actual

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tests. Captive animals will also furnish information in regard to the breeding habits, family life, and longevity of their race; but these things are apt to be more affected by the abnormal conditions of captivity than is the animal's appetite.

For the study of mental traits and sense development of animals it is necessary to become familiar with some of the recent literature of comparative psychology and animal behavior before drawing conclusions; but it is also very desirable that the laboratory methods employed by students of animal psychology should be supplemented by close observation of the animals in their natural environment. Anecdotes relating the wonderful intelligence or fidelity of an animal whose history is unknown are no longer considered scientific literature. In the field of animal psychology there is also special need for the careful study of the development of the senses and mental life, and of the awakening of hereditary instincts in young animals.

An excellent and little-appreciated means of getting information concerning the general activities of some animals is the study of their tracks in the snow. By seizing upon a favorable opportunity, when snow lies fresh and soft and where it is little disturbed by animals or men, one can follow the tracks of an animal, say a mink or a weasel, and learn its nightly range, where it has turned aside from its path and why, what it has eaten, and whether it has traveled singly or in company. This may be a muscle-tiring task, for most carnivorous animals range far in a night. The snow records of wood mice and shrews are also good indexes of their activity and of their enemies. Tracks of rabbits help one to learn what the animals have been eating, but, on account of their great number and erratic character, have less value than those of some other animals. Even birds leave tracks in the snow that show their favorite haunts and indicate the source of their winter food.

A most interesting study, although not a new one, is the ecology of some group of animals within a limited area of varied character. Suppose it is birds we are studying and we have a convenient area of, say, a square mile, marked off by roads or streams or some other definite boundaries. The area, to be most attractive, should contain a house and its grounds, cultivated fields, meadow, brushy

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pasture, wood lot, and swamp, though all of these are not necessary. What birds regularly nest in each division? Is a species restricted to one division in its nesting site, and, if it is at all restricted, is this because of enemies, lack of material for building nest, suitable spot to place the nest, or some other reason? Does it feed in the same area in which it nests, and on what does it feed? To what extent does it wander into the tracts which it does not regularly inhabit? What is the relative abundance of birds in each tract? As an answer to the last question a guess is worse than useless, and the only way to answer it is to take a census of the entire area on several different days, checking up the results and making such allowance for error as experience seems to dictate.

A similar study could be made of the small mammals, using snow records, trapping, and frequent observation as the means of getting data.

Batrachians are also of great interest when studied in relation to their environment. How many frogs and toads frequent a given pond during the breeding season? Do they prefer one body of water to another equally accessible, and if so, why? What becomes of them after the breeding season? What are the details of growth and the transformation changes accompanying growth? These are a few of the many problems awaiting study among the batrachians.

I have not alluded to reptiles and fishes, nor to any of the invertebrates, not because they do not offer many problems of great biological interest, but chiefly because they are less familiar to me and there is not space to discuss all.

The last century has been rich in biological discoveries, but as yet we have learned only a line here and there in the great book of life. The microscope, the scalpel, and the museum can teach us much of what is left, but there are many pages that can be read with pleasure and profit in the open.

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EDUCATIONAL NEWS AND EDITORIAL COMMENT

OBSERVATIONS ON THE NEW ORDER IN HIGH SCHOOLS

It ought to hearten any teacher to note the changes which are taking place in our methods of teaching, particularly in the secondary school. The writer has been observing the new order in a high school with which he is well acquainted. Five years ago German was taught to beginners in this school very largely from a grammatical textbook. After two years of instruction, the typical pupil could read a little classical German, but he could not read even this very readily or with genuine enjoyment. But today, in this same high school, pupils are at the outset introduced to spoken German, and they are required to speak it, to read it, and to write it almost from the beginning. They are now about as facile in the use of the language after six weeks of instruction as they formerly were after two years of grammatical drill.

Again, in the high school referred to, civics was taught five years ago mainly from a formal book which dealt with government wholly on the structural side. The divisions of the government, the officers, and their duties, were learned "by heart," and the Constitution was memorized; but very little was gained respecting government as it affected the pupil in his everyday life. However, this year the study of civics has been carried on by having pupils find out at first hand how their own city is governed in all its interests and activities. The pupils are required to go straight to the sources of information and discover how the expenses of government are provided for; how officers are chosen; and so on through a large number of interesting and exceedingly practical problems. Ordinarily, young people are not enthusiastic over the study of civics, but there is a marked change in their attitude in the high school in question this year.

Five years ago the pupils in English classes memorized rhetorical rules, and read over examples in which they were embodied. Occasionally they would write a theme in the attempt to apply the rules which they had learned. Today they are reading entire selections illustrating effective modes of expression, and they are writing a good deal with a view to expressing themselves on familiar subjects in a direct, clear, and pleasing manner. Five years ago algebra was taught as a purely formal, symbolical subject. But now there is considerable improvement, since

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pupils are constantly solving practical problems which have a more or less direct bearing upon everyday affairs, though we think still further improvement can be made in regard to this subject.

We might go through with practically all of the subjects taught in this high school and show radical and encouraging reform in the way of employing vital and effective methods of teaching. The aim of making teaching *go to the mark*, in the sense that it will enable the pupil without waste of time or energy to get a subject as it will be of service in real life, is apparently coming to be accepted and generally practiced by teachers in the high school.

M. V. O'SHEA

NATIONAL SOCIETY FOR THE PROMOTION OF INDUSTRIAL EDUCATION

The annual conference of the National Society for the Promotion of Industrial Education was held in Philadelphia December 5, 6, and 7.

The meetings were well attended and gave evidence of an ever-increasing popular interest in the work which this Society is organized to advance. Over three hundred sat down to the banquet at which the chief attraction was an address by Senator Page on Senate Bill No. 3, known as the Page Vocational Bill, which provides federal aid for vocational instruction in agriculture, homemaking, and the industrial arts.

The programs of the several sessions were full and varied, but three phases of the general problem recurred frequently. These were the need of specially trained teachers; the relation of vocational education to the regular school system; and the necessity of state aid in establishing and maintaining vocational schools or departments.

One of the most important events of the conference was the meeting of a special committee to formulate a statement of principles which should govern state legislation relating to vocational education. The membership of this committee was representative of the manufacturing interests, of social organizations, of state and city systems of education and of higher educational institutions.

Incidental to the discussion was the examination of the new bills proposed by Pennsylvania and Indiana. The latter bill is the work of the Indiana Commission on Industrial and Agricultural Education and, if enacted as is confidently expected, it will give Indiana the most comprehensive provisions for education in agriculture and the domestic and industrial arts of any state in the country.

Throughout the discussion it was evident that the most important

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of all questions was that relating to the local administration and control of vocational education, and especially as to whether it should be dominated by the educational or the vocational interests. This involved the question whether vocational training should be under the regular boards of education or under boards specially appointed to promote and control such education. The following quotation, from the statement of principles adopted, clearly indicates the conclusions of the committee regarding this important question:

> Effective administrative control on the part of the local community of both vocational and general education requires the existence of a local board or committee possessed of ample power to establish and maintain under proper state supervision general and vocational schools. When the existing local administrative authority for general education does not provide for the establishment and promotion of adequate vocational education, legislative provision should exist enabling industrial and other occupational interests, under proper restrictions, to procure the creation of a special board of control for vocational education.

Copies of the complete statement of the Society regarding the principles and policies that should underlie state legislation for a state system of vocational education may be had by applying to Secretary C. A. Prosser, 105 East 22d Street, New York City.

VOCATIONAL GUIDANCE

The organization of a new national society was effected at Philadelphia by a committee appointed during the recent conference on vocational guidance held in New York City. This society will have for its purpose the advancement of vocational guidance. It will work in close co-operation with the National Society for the Promotion of Industrial Education, until such time as that society may feel disposed to take up this work as a part of its own general purpose. More information regarding this new society will be given later, when its organization has been completed.

FRANK M. LEAVITT

VERMONT DEALING WITH THE GENERAL PROBLEM OF EDUCATIONAL ORGANIZATION

The governor of Vermont in a recent message to the legislature recommended a general commission to take up the problems of education in that state. Quoting from his message, the following paragraph sets forth the needs of such an inquiry:

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In view of the fact that the superintendents and principals responsible for the direction of the elementary and secondary schools of the state have proposed legislation for the improvement of our common schools, it would seem wise to proceed still farther. Our institutions of higher learning, with each returning biennial session of the general assembly, are requesting larger appropriations for support and maintenance, and it is important that the status of these institutions in relation to the state shall be clearly and speedily established. I therefore recommend that an education commission be created whose duty it shall be to inquire into the subject of public education in Vermont. I further recommend that this commission report at the earliest possible date on the several necessities of the University of Vermont and State Agricultural College, Middlebury College, and Norwich University, with such recommendations as will prevent unnecessary duplication. As soon as possible after making investigation of the institutions of learning, the commission shall recommend, by bill or otherwise, such organizations of the educational and secondary schools of the state in adjustment to the entire educational system of the state as will promote the ends of economy, harmony, and unity.

This message is of interest in connection with one of the notes which was inserted in the last number of the *School Review*. Attention was there drawn to the fact that the state of Iowa has found it necessary to make some readjustments between the state institutions of learning, so that there shall be no conflict and duplication within these various institutions. The state of Vermont evidently finds itself confronted by very similar problems, and is taking at this early date some measures to relieve the probable duplication of work in the various institutions.

The same type of problem that has confronted Iowa and is now confronting Vermont is so common throughout the states of the Union that it will be of interest to note from time to time the methods adopted by the various states to overcome these embarrassing duplications in educational organization.

THE ORGANIZATION OF PERIODS OF STUDY IN HIGH SCHOOL

The township high school in DeKalb, Ill., has adopted a method of dealing with the problem of supervised study within the high school. There are six regular periods of recitations within the school program. The school opens at 8:50 in the morning and closes at 3:25. Between the third and fourth periods in the forenoon, and between the first and last periods of the afternoon program, periods are interpolated which can be used for general purposes and for supervised study. The morning period is devoted to such matters as vocational guidance, general assembly, and other general purposes of the school. The afternoon

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period is a study period. On Monday those classes which recite during the first period in the morning go to the rooms where they ordinarily recite during the first period, and there they meet the teachers, who help them study. On Tuesday the classes go to the rooms where they recite during the second period in the morning. Here they have an opportunity to study a different type of lesson from that which they took up on Monday. By distributing these study periods during two successive weeks, each pupil comes in contact with every teacher with whom he has work.

Some method of solving this general problem of high-school study certainly must be worked out. Whether the students shall do the work in the regular class, or shall have an opportunity of the sort which is here described, is a matter of detail of organization. It is hoped that after the experiment has been tried at the DeKalb township high school for some time, the members of the high-school staff may be persuaded to give an account of their experiences. In the meantime other experiments of the sort would be very interesting to all high-school teachers, and it is hoped that the insertion of this note among the general news items may draw out other information of a similar type.

THE NEW YORK INVESTIGATION

The history of the New York Educational Investigation is of more than passing interest to every citizen and especially to every teacher in the country. The inquiry may be said to have originated in a widespread impression that the expenditure of $27,000,000, which was the amount of the New York school budget when the movement began, and the large increase in this amount which was asked by the Board of Education, needed the most careful scrutiny. There is always ground, apparent or real, for considering the advisability of the reorganization of the school system of a great city. Sometimes supervision seems overorganized and ineffective. Sometimes school opportunities do not seem to be equitably distributed. The people have a right to ask at all times for the evidences of efficiency and for suggestions which will correct existing defects.

It happened in New York that one of the natural avenues for the expression of this demand that school expenditures be scrutinized was the Bureau of Municipal Research. The head of this bureau, Mr. Allen, has figured in the investigation and in the subsequent disagreements to such an extent that he must be recognized in order that the present

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situation may be understood. Mr. Allen is a destructive critic of the present school system and of the present superintendent of schools in New York. The resources of the bureau have time and time again been used to give wide publicity, not merely to facts about the New York system, but to adverse conclusions already reached. In short, Mr. Allen has decided that Superintendent Maxwell is incompetent, and means to have this decision accepted if possible.

Mr. Allen succeeded in impressing, among others, Mr. Mitchel, president of the Board of Aldermen of New York, with the result that Mr. Mitchel and his colleagues on the Board of Estimate felt that an inquiry must be made into New York school conditions. The Board of Estimate appointed a committee consisting of Mr. Mitchel, Mr. Prendergast, comptroller of the city, and Mr. Miller, president of the Borough of the Bronx, to organize such an inquiry.

At this point the interesting fact developed that the conduct of an educational inquiry is a complicated matter. The committee consulted with a number of educators in the effort to find out what they ought to do. The present writer may be permitted to contribute his personal experiences. He went to New York on the invitation of Mr. Mitchel. He was taken by Mr. Mitchel's aide to the Bureau of Municipal Research, where the longest and most exhaustive discussion that he had of the expected inquiry was carried on. Afterward he met Mr. Mitchel for a short time and took luncheon with Mr. Mitchel, Mr. Prendergast, Mr. Allen, and one other gentleman whom he has forgotten, but who had no official relation to the inquiry. The impression that the present writer gathered during that visit to New York was that Mr. Allen was a factor in the inquiry more interested and influential than any of the city officials. He gathered the impression that the success of the inquiry was in serious jeopardy because of the influences surrounding it and because of the existing conclusions in the minds of those in contact with the inquiry. He held then and holds now that an inquiry of this type is and ought to be most significant for education. He holds that its methods ought to be scientific and not personal.

The outcome of many conferences of the type to which the writer was introduced was the engagement of Professor Hanus of Harvard to conduct an educational inquiry. Professor Hanus will sooner or later, it is to be hoped, give a frank and full statement of his experiences. It is generally known that as soon as he reached New York he encountered obstacle after obstacle. The mayor called in question the legality of the investigation. The committee of the Board of Estimate demanded that

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information be instantly furnished as a basis for criticizing the budget of the Board of Education. The head of the Bureau of Municipal Research expressed in public his dissatisfaction with the methods of the inquiry. In short, confusion was made as confounding as possible. In the meantime Professor Hanus went forward with firmness and with the kind of impersonal candor which brings to him the confidence of educational workers. He gathered some of the best students of education in the country and went about his difficult task. Reports were ultimately written and turned in. These have not yet been published.

Here opens a new chapter. Among the reports was that of Professor Moore of Yale. Professor Moore's report contained, along with other matter, a sharp criticism of the Board of Estimate for interfering with the charter rights of the Board of Education, which is empowered to "have the management and control of the public schools and of the public-school system of the city, subject to the general statutes of the state relating to public-school instruction and to the provisions of this act." It is the contention of Professor Moore that the Board of Education is deprived of its rights through the indirect control assumed by the Board of Estimate and by other municipal agencies. The *Independent* of November 14 contains a full statement by Professor Moore of his position on this and other matters. When Professor Moore's report was read by Mr. Mitchel and his colleagues they were not pleased. They sent to Professor Moore many questions and finally refused to accept or print the report. This brought the report more attention than it could otherwise have hoped to command.

Note some of the types of publicity given to the matter. Here is a letter from Professor Hanus to the editor of the *New York Globe:*

School Editor of "The Globe":

SIR: I have just received a letter from the committee on school inquiry dated October 31, 1912, informing me that the committee has rejected Professor Moore's report. In several New York papers of October 31 and November 1, your paper included, I have read accounts of the report made by the committee on school inquiry to the Board of Estimate and Apportionment. The condemnation in public of Professor Moore's report, in advance of its publication, is as unjust as is the condemnation of the report itself. Professor Moore's report is exceptionally valuable.

If the people of New York City accept the judgment of the committee on school inquiry without insisting that Professor Moore's complete report be allowed to speak for itself in published form, crying evils in the administration of the schools of the city will not be seen in the light in which they should be

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seen, and such evils are therefore likely to continue, to the great disadvantage of the city.

The account of a conversation that I had with President Mitchel about Professor Moore's eligibility for the work to which he was assigned is almost pure fiction. I had been told by a close friend of President Mitchel that Professor Moore ought not to have any share in the inquiry because he had "insulted" Mitchel in a conference between them. But when I asked President Mitchel about it and told him that I wished to secure Professor Moore's services, but that I did not wish to take any steps toward doing so if what had been told me were true, President Mitchel said he knew nothing about any insult; and he approved Professor Moore's appointment without qualification.

Further, whether the committee intended to slight us by writing to my associates about their reports instead of to me is immaterial. What I objected to was the attempt of the committee—and that through outside and irresponsible agencies—to edit or revise the report which my associates and I are submitting, as the following quotation from my letter to President Mitchel, dated August 25, 1912, will show:

I note that you say the committee did not intend "to slight" me by writing directly to my associates about their reports. My chief objection to the course you pursued is that it is an attempted editorial revision of the report which as specialist in charge I am making to your committee. Naturally, I object to any editorial revision of the report except my own, including such co-operation of my associates as I need. My revision does not, of course, exclude from consideration such comments of yours as seem to me important.

Very truly yours,

PAUL H. HANUS.

HARVARD UNIVERSITY
CAMBRIDGE, MASS.
November 1, 1912

The Bureau of Municipal Research was interested enough to publish and circulate a folder giving a history of the report, including the following statements:

Early in July the summary of the report was submitted.

July 26, chairman of the school inquiry committee, John Purroy Mitchel, to learn "how exhaustive the investigation was" and "to understand its scope," asked Mr. Moore 18 questions.

July 28, Mr. Moore asked "to have his full report read . . . ." before discussing these 18 questions.

August 19, 223 questions were sent to Mr. Moore in a letter which closed, "For the purposes of the committee and the city, your report is wholly valueless as it now lies. It will not be published unless the additional information requested by the committee is furnished, and that promptly."

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September 3, Mr. Moore wrote from London that the questions were "irrelevant, immaterial, and intended to confuse the issue. . . . ."

October 23, three members of the school inquiry committee wrote to Professor Hanus *inter alia*, "This committee, not the specialists who were employed as its investigators, is responsible to the people of this city for the results of the inquiry, and this committee is not to be expected to accept and make itself responsible for any report, the writer of which withholds from the committee the essential facts on which his conclusions are based and the sources from which these facts were drawn."

October 31, report was made by the school inquiry committee to the full Board of Estimate and Apportionment, explaining that the Moore report was rejected and would not be printed because it lacked supporting facts. "It should be clearly understood that at no time did the committee request any one of the specialists to change any conclusion or recommendation contained in his report. Facts, where lacking, were requested."

The folder then prints the following offer:

For the committee's report address John Purroy Mitchel, chairman, committee on school inquiry, 51 Chambers St. We shall be glad to circulate questions, suggestions, and criticisms from school men and editors bearing upon the general questions of public policy involved in rejecting and refusing to print reports whether by experts or non-experts which do not contain the facts upon which allegations, charges, and recommendations are based.

BUREAU OF MUNICIPAL RESEARCH
261 Broadway, New York

The Public Education Association of the city of New York in its *Bulletin* of November 27 discusses the matter as follows:

We have no brief for Professor Moore or for his report; doubtless two views of it may be entertained, and doubtless also these views will differ according to one's study and experience with the problem of city school administration.

Some presumption should be accorded to the soundness of method and accuracy of result of Professor Moore's work, at least to the extent of giving it a dispassionate consideration. What treatment of this kind it may have received during the period in which it was under discussion between the committee or any agency the committee may have seen fit to employ and Professor Hanus and Professor Moore we cannot completely say, but it is our opinion that an approach to Professor Moore, based on the 223 questions which were addressed to him in one communication, was not calculated to achieve a constructive result. From the point of view of the educational expert these questions were not intended to elicit "facts," but were in the nature of hostile cross-examination, badgering in tone, and sometimes offensive in their implications.

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The public cares nothing for the right or wrong on the personal side of the controversy over the Moore report, and that is now regrettable history. But it does very much care for an authoritative appraisal of a school system by the persons who, gathered from the most important educational centers of the country, have been a full twelvemonth minutely scrutinizing the system, and it does not wish to see the results of that scrutiny wasted by conflicts between individuals or official bodies.

We believe the public properly takes the view—as Dr. Hanus and his associates most certainly do—that the Hanus report is to be taken as a unit, and attains its full value only when regarded in that way; that the rejection of any part of it dismembers it, throws the remaining parts out of proportion, and leaves an important field of inquiry untouched. This view is reasonable in itself, but it may be noticed that this sort of inquiry (though never so extensive) has been conducted before, notably in the school systems of England, and that Sir Michael Sadler's reports upon his investigations are in the nature of essays, illuminating technical and abstruse facts to the interested lay public and reaching to the fundamental philosophy of city school systems.

It is to be noted further that Sadler's reports—favorable or unfavorable—were printed by the various municipalities in full as Sadler wrote them.

The last chapter of the matter is as follows: Professor Goodenow of Columbia University and Dr. Fredric C. Howe have been employed to fill out the section of the report for which Professor Moore was originally brought in.

Only one impression can come to the impartial observer. The committee of the Board of Estimate has done its work badly. The committee probably was unfit from the first to deal with the large enterprise which it took up. Prejudice and mismanagement have interfered with the execution of a plan worthy of better control. The inquiry suffers because it was not allowed to follow scientific, objective lines. The demand for inquiries of this type is sure to be heard more and more frequently in the future. New York has shown how such an inquiry ought not to be motived and controlled. It is to be hoped that some large and influential educational system will get itself examined in a wise and sane way so that the country may see how the work can be done.

C. H. J.

AN EXPERIMENT IN COLLEGE ORGANIZATION

A plan for a new type of college education in the last two years has been worked out by a committee at Columbia University. This plan is described in the report of Dean Keppel. The organizers of this plan do not aim to provide for specialization during these last two years, but are

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attempting to bring it about that students shall continue their general education. This general education, furthermore, cannot be secured, it is assumed, under the present arrangement. There must be a new group of courses and there must be an entirely different type of organization of the students' time, from that which is common in the present college course. The following statement of the general plan is given:

Students who are ready to enter the Junior class of Columbia College may elect what has been tentatively christened "The Conference Program." Two years of residence will be necessary for a degree, there being no provision for advanced standing. The course of study is to be arranged, not on departmental lines, but the aim will be to represent among the teachers the principal divisions of knowledge. A certain number of professors have already offered to conduct, in addition to their present programs, one three-hour course continuing through two years. None of these courses is to be elementary, the student being expected to familiarize himself by private study with the elementary parts of the subject not already covered by his previous collegiate work. The student is not to be graded. He may freely enter all courses, and must notify the registrar as to the courses which he plans to offer, with the approval of the instructor, for the degree. Each student is to appear at least twice a year before a conference of all of the instructors of students in the group, and to present, by means of an essay or otherwise, evidence of the progress of his studies.

The sort of program which is here outlined suggests a discussion which has frequently been held in American faculties of the advisability of conducting in American colleges a course somewhat similar to the course which is known in English universities as the "pass course." The "honor" student in an English university is a student who is specializing in a single department or in a limited group of closely related departments. The "pass" student, on the other hand, is supposed to be in pursuit of a general education. He is not subjected to the same rigorous discipline as his fellow-student who is seeking honors. In the Columbia plan, apparently, we have something related to the "pass" plan. There are undoubtedly many students who feel that they would profit by taking a more generalized course. The conflict between the interests of these students and the students who wish to enter one of the professions as soon as possible has long been a notable feature of our American college education.

Again, there is no necessary connection between a general education and the new mode of examining the student and caring for his required attendance on classes and courses. Yet there is a clear justification for the effort to make the student his own guide in the organization of his

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curriculum. The experience of Harvard would seem to be a warning against the assumption that even mature college students can be freed from the requirements of regular class attendance. The new Columbia plan will therefore be of double interest to observers because it is an experiment in college administration as well as in subject-matter of instruction.

The development of a plan of this type indicates very strikingly how dissatisfied both college students and college faculties are with some of the features of American college organization. The contrast between mature and immature students ought to be more fully recognized. The problem of specialization has certainly not been solved. In short, experiments in college education are recognized as necessary and desirable.

HIGH-SCHOOL EXTENSION COURSES

The *Los Angeles Tribune* of November 14 prints the following news item:

Literature classes will open at the Los Angeles High School Sunday, November 17, at 3:00 o'clock, as the result of action by the Board of Education, granting permission for the opening of the school on Sunday. For the first time in the history of the city schools, classes will be held on Sunday. The innovation was brought about by the energy of the members of the high-school Social Center Society and the members of the Sunrise Club, an association of young men.

The course of lectures has been arranged for the literature work, and high-school teachers have volunteered their services for the work. C. C. Kelso, director of the social center work, announced the course yesterday.

Sunday, November 17, at 3 P.M.—"The Influence of Music," by Miss M. Dietrichson, professor of music.

November 24, at 3 P.M.—"Longfellow," by I. D. Perry, teacher at the Los Angeles High School.

December 1, at 3 P.M.—"Emerson," Miss Jeanette Pierce, teacher at the Los Angeles High School.

December 8, at 3 P.M.—"Bernard Shaw," by Miss Nina Updyke, teacher at the Los Angeles High School.

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BOOK REVIEWS

Short Stories for Oral French. By ANNA W. BALLARD. New York: Scribner, 1912. Pp. xv+126.

This book is one of a series of French and German books which Scribner's Sons are publishing with the apparent intent of diffusing, if not exactly introducing, the "reform method" in American schools. As far as is needful for the use of the book itself, Miss Ballard explains the principles on which the method is based in her preface, and in the explicit directions given to teachers. Anyone desiring further information on the method will find it in a concise form in the *Report of the Committee of Twelve of the Modern Language Association*, D. C. Heath & Co., 1911.

Miss Ballard's book will undoubtedly fulfil its promise of providing adequate material for teachers who wish to give the method a trial. The stories appear well chosen, they have already stood the crucial test of classroom use, and are of sufficient interest and variety. Each story is followed by a list of questions, which the learner is expected to use in preparing the lesson for the next day. If these questions were omitted with a few of the later stories, it would be possible to assign to the class the very profitable task of formulating their own questions. The vocabulary does not translate the words into English, but defines them in French. The great difficulty of doing this with a limited vocabulary undoubtedly accounts for some rather questionable definitions. Is the pupil who fails to understand the word *animal* really helped by the definition, "être organisé et *doué* de mouvement," or does "qui est sur son *séant*" really enlighten him on the meaning of the word *assis*? The presentation of the French verb, the only grammatical topic treated, might call for some discussion, but only one remark seems imperative. Statements like "En français il y a trois conjugaisons," everywhere regrettable, become doubly so in a book of this nature. The learner is entitled to the truth in the study of language as in any other study, and should be taught nothing that must be unlearned later. Why not say at least "trois conjugaisons régulières"?

The very commendable purpose of the book greatly overshadows in interest the merit of the book itself, since the reform method is almost new to this country, and its successful introduction would most assuredly mean a step in advance on the road of educational progress. But just here, perhaps, a word of caution may be in order. Not until experiments in progressive education are attended with the scientific thoroughness and preparation that attend, e.g., the experiments in progressive agriculture, will they give lasting and conclusive results. The progressive farmer who wishes to raise a new

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crop has his soil scientifically tested, and informs himself carefully with regard to the climatic conditions and the mode of culture under which the crop has been successfully raised, and regulates his own mode of culture accordingly. The reform method, so successfully used in German (and some other European) schools, presupposes for this success conditions that do not generally obtain in American schools, some, indeed, that are actually "antagonistic" to the usual methods employed there. Only one point, which is, however, vital, can be touched upon here.

According to Miss Ballard's directions the teacher will have to devote three recitation periods to each story, without taking into account the frequent reviews that are advocated. In the first period the story is told to, and read by, the class; in the second it is recited in French; in the third it is written in French. Done thoroughly and conscientiously this work will take up nearly the whole of the three recitation periods. On the contrary, after the story has been told and read in class, the average "diligent" pupil should not need more than half an hour to prepare the oral recitation for the next day, and barely half that time to prepare the written work for the third day. With some attention paid to verbs and other grammatical points, the possible profitable preparation would scarcely exceed one and a half hours for the three recitations, and would average considerably less for the "above the average" pupil. The average amount of preparation profitably devoted to each recitation period would not exceed half an hour, except for deficient pupils, and this would be just the amount of outside preparation expected in the German school-system. The American school-system, on the contrary, presupposes, for each forty or forty-five minute recitation of a college-preparatory unit, one hour and a quarter or one hour and a half outside preparation, nor can the required amount of reading (from 100–175 pages the first year) be "covered" unless the whole of this time is completely and profitably utilized. In other words, in German schools "the burden of learning" is laid principally on the classroom work, done under the direction of the teacher; in American schools it is laid principally on the preparation period, in the teacher's absence, and this period, in theory at least, is almost double the classroom period. It is noteworthy that the Committee of Twelve, in their thorough discussion of the different methods from the viewpoint of the American school, make no mention of the vital point of the time relation of classroom and preparation period, though it is a *sine qua non* factor of success (or failure) in all "imported" methods.

The German beginner who is supposed to devote not more than an hour and a half a day to the study of French is undoubtedly getting better value for the time employed than the American beginner who is supposed to devote from two hours to two hours and a quarter to the same study. But the American teacher who, without a careful analysis of the situation, attempts to introduce the German method of teaching into American conditions may be greatly disappointed, because much of the time specifically allotted to the outside preparation is voluntarily relinquished, and this loss is not always sufficiently

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offset by the better method of classroom instruction. The result, then, is that the blame that should fall on the working-conditions is laid on the method itself, and ultimate progress is really rather retarded than advanced by such sporadic experiments.

Miss Ballard suggests, indeed, that the book can be used for oral work "no matter what other textbooks are appointed." This is true, and a little oral work cannot help proving beneficial with any method. But in the interest of real progress, is it at all desirable that the reform method should ever be judged in this country not on its own merits but by the incidental results obtained when it is grafted upon other methods, whose fundamental principles may actually be diametrically opposed to its own?

C. J. CIPRIANI

CHICAGO

Educational Psychology. By EDWARD L. THORNDIKE. 2d ed. New York: The Science Press, 1911.

In this second edition the material which was presented in the first edition is completely recast and somewhat enlarged. The aim is the same as in the first edition, namely, to present the results of investigations—mainly by the statistical method—of the influence of heredity and of environment upon mental traits, and of individual differences in mental traits. In the second edition the arrangement of chapters has been made more systematic and several chapters have been omitted. The character of these changes indicates that the author's conception of his task has become clearer and more unified. Besides these changes the book is rewritten throughout, and is brought down to date by the discussion of investigations which have been made since the publication of the first edition. This book stands alone in the field which it covers, and the new edition is welcome.

FRANK N. FREEMAN

UNIVERSITY OF CHICAGO

Plant Physiology, with Special Reference to Plant Production. By BENJAMIN M. DUGGAR. New York: Macmillan, 1912. Pp. xv+516. $1.60 net.

Professor Duggar has undertaken the task of presenting the essentials of plant physiology as they relate to crops. It seems strange, since plants are the essential things in agriculture, that plant physiology has been so long neglected as one of the essential phases of study. In agricultural and horticultural schools chemistry has usually been the underlying scientific subject, perhaps because it was well organized at an earlier date than was botany, and therefore its relation to plant productivity more easily shown; and possibly chemistry has maintained its position as the fundamental agricultural science because of the "inertia of momentum" that it has acquired through the fact of its past use. Professor Duggar's book organizes the

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facts of plant physiology in such direct relation to plant productivity that it certainly will present a strong appeal, both to general students of botany and to those who look forward to pursuits that depend upon the use and knowledge of plants. The book is designed "to consider both the student and the general reader interested alike in the fundamental requirements of plants and in plant production." The author is obviously one of that rapidly increasing number of people who believe that science does not lose but rather gains through the increased significance that is secured by a direct relation of the science study to aspects that are worth while in our fundamental industries. This point of view makes the book a most pleasing divergence from the usual organization of botany.

Provision is made for a definite study of the structures of plants, since the function of parts cannot be determined without definite knowledge of the structures by means of which functions are performed. Therefore we find the second chapter taking up the plant cell and treating such topics as appear in other texts. "The Water Content of Plants" follows, and the succeeding chapters deal largely with plant activities, always including the amount of study of structures that is essential to an understanding of functions. The ultra-cautious physiologist may object that in connection with the in-take and out-go of water a ıd other materials from the plant too small an amount of physics and chemistry is presented, and that there is too little detail regarding important researches in the field covered. But it must be remembered that the author is presenting the significant phases of plant physiology to those who are being trained for a definite problem, a problem which has its own peculiar demands, just as has the problem of the specialist who wishes to give his life to a detailed study of the in-take and out-go of materials from the plant. For example, in a later chapter, the relatively large amount of space given to the relation of plants to destructive forms, either plants or animals, and the preventive measures necessary to obviate the decrease of productivity through parasites, is justified by the fact that this is the kind of plant physiological study that is most needed by the people for whom the author designed his book.

Throughout the book the topics are essentially those which we find in any comprehensive text on plant physiology. The very important difference between these topics here and elsewhere is that the illustrative material and the method of presentation relate directly to a specific use of the science of plant physiology.

The needs of general education demand that all our sciences shall be taught in such ways as may make their materials and methods worth while to general students. This demand has appeared in no textbook on plant physiology until the appearance of this book, and because of this the book is doubtless destined to exercise a potent influence in instruction, especially in agricultural colleges.

OTIS W. CALDWELL

UNIVERSITY OF CHICAGO

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The Festival Book: May Day Past-Time and the May Pole. By JENNETTE E. LINCOLN. New York: A. S. Barnes & Co., 1912. Pp. xiii+74. $1.50.

It is to be regretted that Miss Lincoln and her publishers have selected such a misleading main title for this volume. As the subtitle shows, the work does not pretend to discuss the general subject of festivals, to deal with all the festivals of the year, or even to touch upon all the phases of the one particular festival selected for discussion. This volume is merely an extension of Miss Lincoln's former book entitled *May Pole Possibilities*, and, like that volume, is to be classed among those helpful collections of suggestions for drills and dances in the open air, which fortunately are becoming more numerous. This volume will be welcomed by many institutions which are joining in the strong movement for outdoor spring celebrations. The six chapters deal respectively with "Early May Day Customs"—a helpful though rather hodge-podge compilation from not generally accessible texts; "A Successful May Day Pageant"; "May Pole Dances with the Use of Streamers"; "May Pole Revels"; "Selected National Folk Dances Adapted for May Pole Festivals"; and "Accessories for May Day Pageantry." The musical selections given hardly justify the introductory descriptive word "inspiring." A number of the really excellent old English May Pole songs and dances might easily have been included.

P. W. DYKEMA

ETHICAL CULTURE SCHOOL
NEW YORK

The Present Teaching of Mathematics in Germany. By DAVID EUGENE SMITH, with the Co-operation of Various Graduate Students. (*Teachers College Record*, March, 1912.) New York: Columbia University, 1912. Pp. 124. $0.30.

The *Teachers College Record* is well known to the professional part of the teaching public. The particular issue in question undertakes to give a bird's-eye view of the present situation as regards the teaching of mathematics in Germany. It contains sixteen chapters, the first being an introduction entitled "German vs. American Conditions" by David Eugene Smith. The rest are synoptical presentations of reports on various phases of mathematics in secondary schools of Germany. The second chapter considers the evolution of the reform in Germany. The next seven chapters deal with the secondary schools of the most significant kingdoms of the German empire. The ninth chapter is on mathematics in German technical schools; the twelfth makes a study of commercial problems in higher schools of Germany. The thirteenth is on mathematics in the textbooks of physics; the fourteenth on governmental examinations in South German states; the fifteenth is on descriptive geometry in the *real* schools, and the sixteenth is a résumé of

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conclusions drawn from the entire exhibit. The several chapters are careful condensations of much fuller reports by German scholars, containing the significant features of these reports for American teachers. To one who finds difficulty with the German language, or who lacks the patience to wade through the long and complete reports of the Germans, these synopses will be very welcome. Furthermore, reference is in every case given to the complete report, so that those who care to familiarize themselves more fully with the detail of these reports may readily do so.

This number of the *Record* will be highly appreciated by American students in mathematics. It can be clearly seen from it that the Germans are grappling with their problems with a high degree of success, that their methods and progress are far superior to ours, that many of the problems with which they are dealing are also our problems, and it may also be gathered, between the lines, that the solutions they are giving in many instances are pertinent to the problems now before us. What attitude is being taken by the leading teachers of Germany on the Klein reform movement in teaching, what significance there is to this reform, what meaning it may have for our own conditions, can be fairly well gauged from this collection of reports. The teacher who is trying to keep abreast with current mathematical movements will want to get at just such information as these reports contain. The interpretations made by the several authors cannot always be accepted in the form in which they are given; but enough of the basis for these interpretations is given to enable one to formulate his own conclusions.

The idea of a few years since, that what is being done in the culture countries of Europe on the teaching of mathematics has little or no significance for us, is now in a decadent state. The report makes it clear that very much of direct value to the mathematical teacher can be gotten by learning how the work is done in Germany, no matter if the conditions of German education do differ materially from our own. Every teacher of mathematics in the late grades or in secondary schools should have this report at his elbow.

A Beginner's Star Book. By KELVIN MCKREADY. New York: Putnam, 1912. Pp. viii+148. With many charts and illustrations. $2.50 net.

This book has been written primarily for the general student who is interested in the stars and loves the study of them, whether he is in school or out of school. There is an introduction of seven pages in which the author considers our heritage in the stars and explains the sky as it is mapped out for study purposes. Then follow chapters on objects to be seen in the stellar world, on learning to observe, on star maps for anyone, on objects to be seen in the solar system, on instruments of observation. Then come catalogues of telescopic objects for the use of students, and statistical tables, an index, and a few additional maps. The book is written in popular style and the

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large page makes possible the introduction of some excellent reproductions of photographs. These photographs have been furnished by the Yerkes Observatory, Mt. Wilson Observatory, Lick Observatory, the Lowell Observatory, and others of the highest grade of excellence. The objects selected for photographic reproduction are well chosen to make the reader generally familiar with the various classes of objects within the reach of small telescopes. The text is written in simple style, though, considering the audience to which it is directed, the writer feels the style a bit dry. The explanations, however, are accurate and simple, and the book will meet a real need in those rare persons who interest themselves in the sky because of the pleasure there is in it. From p. 38 to p. 61 there are charts of different parts of the sky, showing objects for the opera glass, field glass, or small telescope, and facing these charts are given maps which enable the beginner readily to identify all the objects presented. Below the charts and key maps are excellent directions as to the objects that will be of most interest to the beginner. The chapter on the sun is of peculiar interest and value. Also the photographs of the moon and planets and the most reliable results of observation will charm the reader and make him want more of this wonderful subject. Sufficient explanation on the instruments of observation to make the amateur or older student intelligent in their use is given in chap. iv.

The writer can but commend the undertaking of the author of this book without reserve. There should be more of such books. The list of names of constellations and stars with their correct pronunciations indicated, together with important information for the observer at the close of the book, is of value also. The information contained in the lists is from the most recent observations and great effort has been made to have this information reliable. On the whole the book will do much to stimulate an interest in astronomy among those persons who do not have access to great and expensive instrumental equipment, but who can easily provide themselves with sufficient apparatus to afford perennial enjoyment in the study of the stars. The publishers certainly deserve great credit for the excellence of their work.

G. W. MYERS

UNIVERSITY OF CHICAGO

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BOOKS RECEIVED

EDUCATION

Arai, Tsuru. Mental Fatigue. (Teachers College Contributions to Education, No. 54.) New York: Columbia University, 1912. Pp. iii+115. $1.00.

Atkinson, E. H. de V., and Dawson, T. S. Report on the Enquiry to Bring Technical Institutions into Closer Touch and More Practical Relations with the Employers of Labor in India. Calcutta: Superintendent Government Printing, 1912. Pp. vii+100. 1s.

Brown, Samuel Windsor. The Secularization of American Education, as Shown by State Legislation, State Constitutional Provisions, and State Supreme Court Decisions. (Teachers College Contributions to Education, No. 49.) New York: Columbia University, 1912. Pp. iii+160. $1.50.

Cooper, Clayton Sedgwick. Why Go to College? New York: The Century Co., 1912. Pp. xii+212. Illustrated. $1.50.

Mead, George H., and Others. A Report on Vocational Training in Chicago and in Other Cities. Chicago: City Club, 1912. Pp. xiii+315.

Parkin, George R. The Rhodes Scholarships. Boston: Houghton Mifflin Co., 1912. Pp. x+250. With a portrait. $2.00.

United States Bureau of Education Bulletins, 1912. No. 12 (Whole Number 483). The Dutch Schools of New Netherland and Colonial New York. By William Heard Kilpatrick. Pp. 239. No. 13 (Whole Number 485). Influences Tending to Improve the Work of the Teacher of Mathematics. (International Report on the Teaching of Mathematics: The American Report, Committee No. VIII.) Pp. 47. No. 14 (Whole Number 486). Report of the American Commissioners of the International Commission on the Teaching of Mathematics. Pp. 84. No. 21 (Whole Number 493). A Comparison of Urban and Rural Common-School Statistics. By Harlan Updegraff and William R. Hood. Pp. 31. No. 22 (Whole Number 494). Public and Private High Schools. Prepared by the Statistical Division. Pp. 375. No. 23 (Whole Number 495). Special Collections in Libraries in the United States. By W. Dawson Johnston and Isadore G. Mudge. Pp. 140. No. 24 (Whole Number 496). Current Educational Topics, No. III. Pp. 25. No. 25 (Whole Number 497). List of Publications of the United States Bureau of Education Available for Free Distribution (September, 1912). Pp. 37. No. 26 (Whole Number 498). Bibliography of Child Study for the Years 1910–1911, Compiled by Clark University Library. Pp. 90. Washington: Government Printing Office, 1912.

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GERMAN

Allen, Philip Schuyler. First German Composition. New York: Henry Holt & Co., 1912. Pp. xxxii+224. $0.90.

Bellows, Max. Dictionary of German and English, English and German. New York: Henry Holt & Co., 1912. Pp. 806. $1.75.

Corwin, Robert N. (Ed.). Keller's Romeo und Julia auf dem Dorfe. New York: Henry Holt & Co., 1912. Pp. xi+240. $0.35.

Fife, Robert Herndon (Ed.). Heine's Die Harzreise und Das Buch Le Grand. New York: Henry Holt & Co., 1912. Pp. xcv+310. Illustrated. $0.60.

Glascock, Clyde Chew (Ed.). Mörike's Mozart auf der Reise nach Prag und Ausgewählte Gedichte. Boston: Ginn & Co., 1912. Pp. xxvi+195. Illustrated. $0.45.

Gronow, Anna T. Jung Deutschland. Boston: Ginn & Co., 1912. Pp. xvi+264. Illustrated. $0.90.

Nollen, John Scholte (Ed.). German Poems, 1800–1850. Boston: Ginn & Co., 1912. Pp. xli+405. With a portrait. $0.80.

Pope, Paul R. Writing and Speaking German: Exercises in German Composition and Conversation. New York: Henry Holt & Co., 1912. Pp. x+280. Illustrated. $0.90.

Savory, D. L. Das erste Jahr des deutschen Unterrichts nach der direckten Methode. Oxford: University Press, 1912. Pp. 192. $0.60.

Whitney, Marian P., and Stroebe, Lilian L. Easy German Composition with an Abstract of German Grammar. New York: Henry Holt & Co., 1912. Pp. viii+180. $0.90.

Wilson, A. E. (Ed.). Wieland der Schmied (Adapted from the German Saga). Oxford: University Press, 1912. Pp. 72. $0.40.

HISTORY

Johnson, Allen. Readings in American Constitutional History, 1776–1876. Boston: Houghton Mifflin Co., 1912. Pp. xvii+584. $2.50.

Moritzen, Julius. The Peace Movement of America. New York: Putnam, 1912. Pp. xix+419. Illustrated. $3.00.

Spence, Lewis. The Civilization of Ancient Mexico. Cambridge (England): The University Press; New York: Putnam, 1912. Pp. viii+121. Illustrated. $0.40 net.

World Peace Foundation Pamphlet Series: The World Peace Foundation, Its Present Activities; The Right and Wrong of the Monroe Doctrine, by Charles F. Dole; William T. Stead and His Peace Message, by James A. MacDonald; Revised List of Arbitration Treaties, by Denys P. Myers; Neutralization, America's Opportunity, by Erving Winslow. Boston: World Peace Foundation, 1912.

SCIENCE

Bradbury, Robert H. An Inductive Chemistry. New York: D. Appleton & Co., 1912. Pp. xi+122. Illustrated.

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Bradbury, Robert H. Laboratory Studies in Chemistry. New York: D. Appleton & Co., 1912. Pp. ix+129. Illustrated.

Dryer, Charles Redway. High School Geography, Physical, Economic, and Regional. New York: American Book Co., 1912. Pp. 536. Illustrated. $1.30.

Peabody, James Edward, and Hunt, Arthur Ellsworth. Elementary Biology, Animal and Human. New York: Macmillan, 1912. Pp. xv+212. Illustrated. $1.00.

Reeve, Frederick C. Physical Laboratory Guide. New York: American Book Co., 1912. Pp. x+182. Illustrated. $0.60.

Rose, Mary Swartz. A Laboratory Hand-Book for Dietetics. New York: Macmillan, 1912. Pp. ix+127. $1.10 net.

ART

Barstow, Charles L. Famous Pictures. New York: The Century Co., 1912. Pp. viii+239. Illustrated. $0.60.

Dow, Arthur Wesley. Theory and Practice of Teaching Art. (Second Edition, with Additional Text and Illustrations.) New York: Columbia University, 1912. Pp. iii+73. $1.50.

Kelley, Charles Fabens, and Mowll, William Luther. A Text-Book of Design. Boston: Houghton Mifflin Co., 1912. Pp. x+134. Illustrated. $2.00.

BOOKKEEPING AND MANUAL TRAINING

Bennett, R. J. Bookkeeping and Accounting Exercises. Part I. Pp. 96. $0.40. Part II. Pp. 112. $0.45. New York: American Book Co., 1912.

Ilgen, William L. Forge Work. (With editorial revision by Charles F. Moore.) New York: American Book Co., 1912. Pp. xii+210. Illustrated. $0.80.

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CURRENT EDUCATIONAL LITERATURE IN THE PERIODICALS[1]

IRENE WARREN[2]
Librarian, School of Education, University of Chicago

Abbott, P. The fifth International Congress of Mathematics. School W. 14:416–19. (N. '12.)

Affleck, G. B. Bibliography of physical training and hygiene, May–August, 1912. Am. Phys. Educa. R. 17:624–36. (N. '12.)

Arnold, Frank R. Bicentenary viewpoints of Rousseau. Educa. 33:135–37. (N. '12.)

Brereton, Cloudesley. The character-forming influence of vocational education. J. of Educa. (Lond.) 44:779–80. (N. '12.)

Bronk, Isabelle. Experiences of a non-native teacher of modern languages. Educa. 33:150–58. (N. '12.)

Brown, J. C. An investigation on the value of drill work in the fundamental operations of arithmetic. J. of Educa. Psychol. 3:485–92. (N. '12.)

In the investigation reported in this paper, the pupils who had been drilled did uniformly and considerably better than the others.

Carringer, M. A. The ten year old boy and his books. Educa. 33:166–69. (N. '12.)

Charles, Fred. The second Moral Education Congress. School W. 14:419–21. (N. '12.)

Clark, Herbert F. An experiment in concentration. Psychol. Clinic 6:178–79. (N. '12.)

The effect of permission to leave school when tasks were finished upon a group of boys in a special school.

(The) Cleveland meeting of the American Association for the Advancement of Science. Science 36:707–10. (22 N. '12.)

Preliminary program, directory of meetings, etc.

[1] *Abbreviations.*—Am. Phys. Educa. R., American Physical Educational Review; Cent., Century; Child Wel. M., Child Welfare Magazine; Educa., Education; El. School T., Elementary School Teacher; English J., English Journal; J. of Educa. (Bost.), Journal of Education (Boston); J. of Educa. (Lond.), Journal of Education (London); J. of Educa. Psychol., Journal of Educational Psychology; Lit. D., Literary Digest; Man. Train. M., Manual Training Magazine; Outl., Outlook; Pop. El. M., Popular Electricity Magazine; Pop. Sci. Mo., Popular Science Monthly; Psychol. Clinic., Psychological Clinic; School R., School Review; School W., School World; Sci. Am. Sup., Scientific American Supplement; Tech. World M., Technical World Magazine.

[2] Annotations by Dr. Frank N. Freeman.

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Colby, Lester B. Great new school for Texas. Tech. World M. 18:388–91. (D. '12.)

Crichton-Browne, James. Child study and school hygiene. Child (London) 3:105–16. (N. '12.)

Crossley, M. L. The function of a college education. Educa. 33:129–34. (N. '12.)

Drinker, Cecil K. Undergraduate research work in medical schools. Science 36:729–38. (29 N. '12.)

An investigation of the opportunities for undergraduate research in selected American medical schools.

Du Breuil, Alice Jouveau. Written composition in the high school. English J. 1:537–46. (N. '12.)

Dumville, Benjamin. The methods of teaching reading in the early stages. School W. 14:408–13. (N. '13.)

A comparison of the method of phonetic analysis with the "Look and Say" method to the advantage of the latter.

England's athletic schoolboy. Lit. D. 45:905. (16 N. '12.)

Foxley, Barbara. How children learn to read. School W. 14:413–16. (N. '12.)

A comparison of the phonetic and "common-sense" methods to the advantage of the latter.

Gallienne, Richard le. Children in fiction. Harper 126:73–78. (D. '12.)

Gayler, G. W. Are the elementary schools getting a square deal? Psychol. Clinic 6:174–77. (N. '12.)

A comparison of the salaries and per capita expenses in the elementary and high school.

Hall, John W. Plans for grade lessons in geography. El. School T. 13:171–79. (D. '12).

Hays, Willet M. A national university. Science 36:723–29. (29 N. '12.)

A criticism of certain features of the scheme presented by Presidents Van Hise and James, together with certain positive suggestions.

Hein, Leon F. A. The cost of materials for manual training in the elementary grades. Man. Train. M. 14:129–37. (D. '12.)

Hill, David Spence. The need of practical co-operation of educational and of medical departments in modern universities. Science 36:647–59. (15 N. '12.)

Howe, Charles B. The future of the manual training high school in vocational education. Man. Train. M. 14:105–14. (D. '12.)

(An) industrial university. Pop. El. M. 5:859–60. (D. '12.)

Johnson, Alvin S. The child and social reform. Dial 53:380–83. (16 N. '12.)

King, Irving, and Johnson, Harry. The writing abilities of the elementary and grammar school pupils of a city school system measured by the Ayres scale. J. of Educa. Psychol. 3:514–20. (N. '12.)

The results of the application of the Ayres test to the eight grades and a table showing the variability among eight judges.

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Kirkpatrick, E. A. Financial training of children. Child Wel. M. 7:73–78. (N. '12.)

Koeppel, George. Observations concerning the organization of schools and certain phases of educational work in Germany. El. School T. 13:189–97. (D. '12.)

Leslie, R. Murray. Child welfare and industrial insurance. Child (London) 3:117–24. (N. '12.)

McCracken, Elizabeth. Children in bookland. Outl. 102:686–92. (23 N. '12.)

MacDougall, Robert. The child's speech. II. J. of Educa. Psychol. 3:507–13. (N. '12.)

The influence of the mother's speech as a model for the child.

Moorhead. F. G. College f r egg buyers. Tech. World M. 18:396–98. (D. '12.)

Noyes, Ernest C. Progress in standardizing the measurement of composition. English J. 1:532–36. (N. '12.)

A popular description of the Thorndike-Hillegas method, with approval.

O'Leary, Raphael D. Pity the poor teacher. English J. 1:552–56. (N. '12.)

Paul, Harry G. The teaching of lyric poetry. II. English J. 1:521–31. (N. '12.)

Porter, Elizabeth Crane. A pageant of progress. Outl. 102:653–59. (23 N. '12.)

Prince, John T. Moral training in public schools. Educa. 33:138–43. (N. '12.)

Raycroft, J. E. The athletic research society. Am. Phys. Educa. R. 17:585–98. (N. '12.)

Rickert, Edith. Exclusiveness among college women. Cent. 85:227–35. (D. '12.)

Riis, Jacob A. The New York newsboy. Cent. 85:247–55. (D. '12.)

Robinson, Edward Van Dyke. The reorganization of the grades and the high school. School R. 20:665–88. (D. '12.)

Rogers, A. K. The function of the American college. Pop. Sci. Mo. 81:574–81. (D. '12.)

Ryle, E. A three years' Latin course. School W. 14:401–4. (N. '12.)

Sargent, D. A. Defects in the school curriculum in physical training as shown by the disabilities of college students. Am. Phys. Educa. R. 17:602–7. (N. '12.)

Schools for tractioneers. Sci. Am. Sup. 74:348. (30 N. '12.)

Schurman, J. G. Faculty participation in university government. Science 36:703–7. (22 N. '12.)

A formal proposal to extend to professors representation upon the governing bodies of the university.

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Scott, J. F. Apprenticeship under the English gild system. El. School T. 13:180–87. (D. '12.)

Scovel, Mary C. The theater: a second grade problem. Man. Train. M. 14:115–28. (D. '12.)

Sisson, Edward O. College students' comments on their own high-school training. School R. 20:649–64. (D. '12.)

Smith, F. The psychology of adult reading. School W. 14:404–8. (N. '12.)

A brief account of the results of the experiments on reading—no new material.

Smith, Harlan I. The educational work of a great museum. Science 36: 659–64. (15 N. '12.)

A description of the ways in which a museum may extend the scope of its influences.

Smith, Simeon Conant. Poetic triteness. English J. 1:547–51. (N. '12.)

Snow, Mary S. Essentials in education. J. of Educa. (Bost.) 76:507–8. (14 N. '12.)

Squire, Carrie Ransom. Graded mental tests. III. J. of Educa. Psychol. 3:493–506. (N. '12.)

A continuation of the report on graded tests to include the higher mental processes. Also a classification of abilities in all the tests according to age.

Stowe, Lyman Beecher. Training city boys for country life. Outl. 102: 537–41. (9 N. '12.)

Stowe, Lyman Beecher. Training city boys for country life. II. Outl. 102:584–91. (16 N. '12.)

Thorn-Wright, Doris. Oral reading in its relation to the study of literature. English J. 1:557–61. (N. '12.)

Utsurikawa, Nenozo. The status of Japanese students in America: past and present. Educa. 33:144–49. (N. '12.)

Wallin, J. E. Aspects of infant and child orthogenesis. Psychol. Clinic 6:153–73. (N. '12.)

A critical consideration of the methods of eugenics and of euthenics in promoting the mental and physical welfare of the child.

Wild, Laura H. Training for social efficiency—the relation of art, industry and education. Educa. 33:159–65. (N. '12.)

Woodrow Wilson at college. Lit. D. 45:970–72. (23 N. '12.)

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THE SCHOOL REVIEW
A JOURNAL OF SECONDARY EDUCATION

VOLUME XXI FEBRUARY 1913 NUMBER 2

THE DISTRIBUTION OF HIGH-SCHOOL GRADUATES AFTER LEAVING SCHOOL

GUY-WHEELER SHALLIES
State Normal School, Plattsburg, New York

INTRODUCTION

Of late there has been much discussion concerning the relative rank of students who enter college from high schools. This suggests the question of the rank of students who pass from high school to normal schools. The present paper raises the question with regard to the students who enter the normal schools of New York from the high schools of the state. There is often such poor scholarly material among students who come to the normal schools that it is almost impossible to understand how some of them were able to pass high-school examinations, much less the "regents' examinations" set by the state department. Weak students, to be sure, are found in colleges just as they are found in normal schools. The relative number of weak students in the two institutions has never been determined. The interest in weak students should be extended so as to include good students as well, and a general canvass should be made of the relative grade of all students entering colleges and normal schools as well as of those entering other callings.

This study deals with several specific problems:

1. What is the percentage of high-school graduates who enter, respectively, colleges, normal schools, immediate teaching, professional schools, business, and trades?

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2. In view of the number who enter college, is there ground for the popular belief that high schools are primarily college-preparatory schools?

3. What is the comparative rank of the students who enter colleges and those who enter the normal schools and the other callings?

SOURCE OF MATERIAL

The investigation was confined to students who were graduated from some of the high schools of New York state in June, 1908. In the consideration of grades general averages were not used, but averages in a limited number of subjects known to the schools as the "minimum requirements": i.e., English, 4 years; foreign language, 2 years; history, 3 years; mathematics, 2 years; science, 2 years. These are the subjects required in every good high school. They are also among the requirements for admission to college, and are required from students in New York state who enter normal schools. By using these subjects we eliminate all elective subjects. All the graduates are, therefore, considered upon the same basis.

It should be stated that the students whose grades are used are taken at random throughout the state. Some are from high schools that graduated one in 1908 and others are from high schools that graduated as many as sixty-eight. The class of 1908 was selected because when this investigation was begun the class of 1910 was the most recent class that had been graduated from the normal schools.

METHOD OF OBTAINING THE MATERIAL

In September, 1910, I wrote to the principals of the ten state normal schools asking for information about the normal-school class of 1910. I thus obtained the names of the students in normal schools and also the names of the high schools from which these students were graduated in 1908. After tabulating the information obtained from the normal schools, I sent the following letter to the principals of high schools, inclosing the blank for records:

MY DEAR SIR:

The name of your high school appears in a list from the principals of normal schools as one that has sent successful students to normal schools. I am making a comparative study of students in high schools as to whether they

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Name	English				Latin				German				French				Math.		History			Science					School, Business, or Trade
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	Alg.	Pl. G.	Am.	Eng.	Anc.	Phy.	Bot.	Zoo.	Biol.	Phys.	
Note.—Give Regents' grades when possible.																											

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enter colleges, normal schools, or take up some business or trade. The only way to make this study is by the grades of the students of some recent class, in the "minimum requirements." I have selected the class of 1908. Will you co-operate with me in this by filling out the inclosed blank with the names of the class of 1908 and their grades in the respective studies they may have pursued? If for any reason you cannot do this, will you return the blank to me?

Hoping I am not imposing upon you, I am

Very truly yours,

March 1, 1911

The result of this circular letter gave me the grades of 735 high-school graduates from seventy-five high schools. The passing grade of the students in the New York state high schools ranges between 100 and 60 per cent.

METHOD OF COMPARING STUDENTS

All of the students about whom information was collected were brought together into a single table (Table I). Those who received an average of 84 or better were thus found to be in the highest third of the group; all from 78 downward were found to be in the lowest third. Those receiving 83 and 79 were divided so as to make the groups equal. The facts reported in this table are represented graphically in Chart A.

Any given student who is placed in Table I in the highest third, middle third, or lowest third is retained in the same subdivision for purposes of comparison throughout the whole study. Thus of the 24 included in Table I as receiving the grade 88, eleven went to college and will appear above 88 in the college table and chart; three went to a normal school; none went to professional schools; five went directly into teaching; one went into business; none went into the trades; four remained at home. By following in this way all of the groups who received high, mediocre, and low marks, it is possible to judge something of the character of each group of students.

Tables II to VIII report the details as follows:

Table II represents the students who entered college.
Table III represents the students who entered normal schools.
Table IV represents the students who entered professional schools.
Table V represents the students who began teaching immediately.
Table VI represents the students who entered business.
Table VII represents the students who began a trade.
Table VIII represents the students who remained at home.

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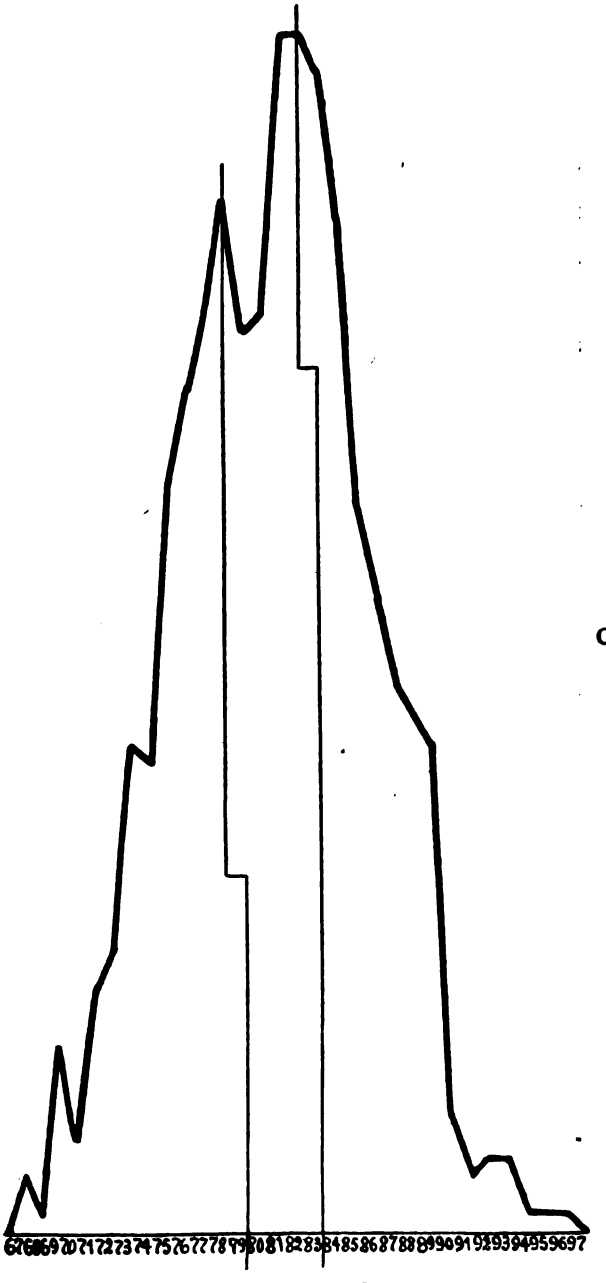

CHART A

CHART A shows the curve which represents the distribution of 735 high-school students who were graduated from 75 high schools in June 1908.

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TABLE I

													36				16													
1	3	1	10	5	13	15	26	25	40	45	49	19	48	49	64	46	54	39	34	29	24	26	6	3	4	4	1	1	1	1
67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97

Seven hundred and thirty-five students who were graduated from 75 high schools. Below the horizontal line are the different high-school grades from 67 to 97. Above are the numbers of students whose averages in the minimum requirements correspond to the grade represented directly under. Thus there were 40 who averaged 76, 24 who averaged 88, etc. The groups at 79 and 83 per cent respectively are subdivided. All at the right of the line between 83 and 84 fall into the third who received the highest marks; all at the left of the line between 79 and 80 fall into the third who received the lowest marks; all between these lines fall into the middle third of the 735 graduates.

TABLE II

									14						11															
1	0	3	2	2	4	5	7	2	5	10	15	18	20	18	15	15	16	11	14	11	14	3	2	4	1	1	1	0	1
68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	

Distribution of 247 high-school students who went to college. These constitute 34 per cent of the total.

TABLE III

											6							2							
2	1	3	1	5	4	16	4	9	3	9	6	13	3	13	5	5	7	3	2						
70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89						

Distribution of 122 high-school students, or 17 per cent of the total, who entered normal schools.

TABLE IV

										3																
1	0	0	2	4	2	1	4	3	2	2	4	2	2	5	0	1	1	0	0	0	0	0	0	1		
69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93		

Distribution of 40 high-school students, or 5 per cent of the total, who entered professional schools.

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TABLE V

	1	0	1	0	1	3	4	6	7	10	9	2	5	3	10	6	6	11	10	5	5	4	2
	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90

Distribution of 117 high-school students, or 16 per cent of the total, who entered directly the teaching profession.

TABLE VI

	1	0	0	1	1	1	0	5	5	4	5	8	4	3	8	7	5	8	2	4	1	1	2	1	0	0	1	0	0	1
	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96

Distribution of 86 high-school students, or 12 per cent of the total, who entered business.

TABLE VII

	1	0	3	1	1	2	2	2	4	3	7	3	4	7	5	3	4	1	0	1	0	1	0	1
	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91

Distribution of 61 high-school students, or 8 per cent of the total, who entered the trades.

TABLE VIII

	1	0	2	0	2	1	1	1	3	2	7	3	6	2	2	1	4	2	0	0	0	1
	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93

Distribution of 41 high-school students, or 6 per cent of the total, who remained at home.

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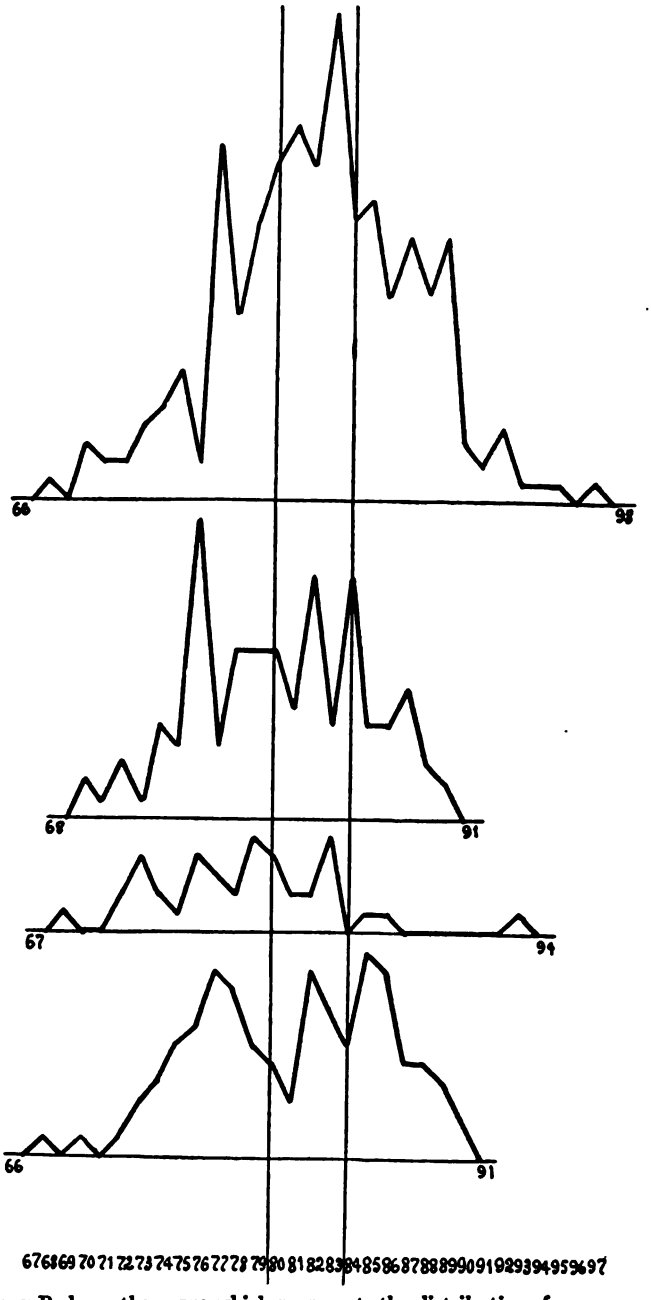

CHART B shows the curve which represents the distribution of 245 or 34 per cent of the 735 students of Chart A who entered college.

CHART C shows the curve which represents the distribution of 122 or 17 per cent of the 735 students of Chart A who entered normal schools.

CHART D shows the curve which represents the distribution of 40 or 5 per cent of the 735 students of Chart A who entered professional schools.

CHART E shows the curve which represents the distribution of 117 or 16 per cent of the 735 students of Chart A who began teaching at once.

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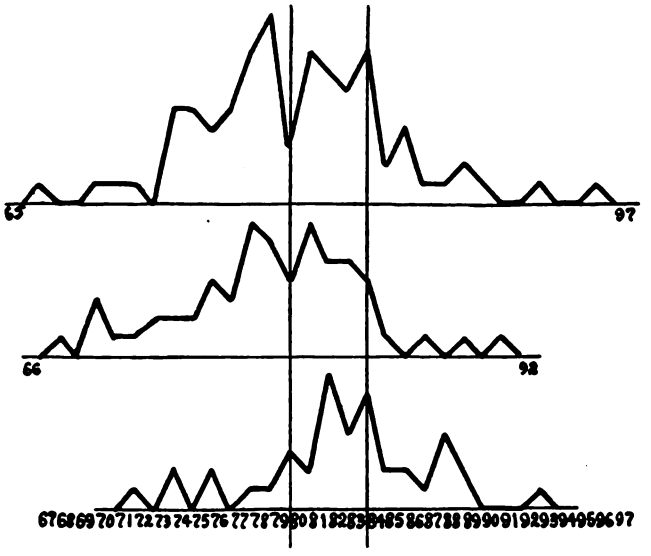

CHART F

CHART G

CHART H

CHART F shows the curve which represents the distribution of 86 or 12 per cent of the 735 students of Chart A who engaged in business.

CHART G shows the curve which represents the distribution of 61 or 8 per cent of the 735 students of Chart A who began a trade.

CHART H shows the curve which represents the distribution of 41 or 6 per cent of the 735 students of Chart A who remained at home.

Chart J is added in order to show the relative numbers in each group. The height of the various blocks and the numbers given below each block indicate the later occupations of the 735 students under consideration.

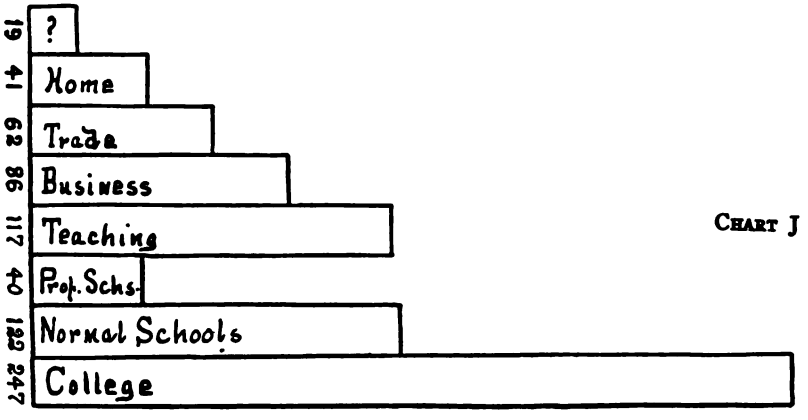

CHART J

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TABLE IX

	Expected	Actual	Percentage	Expected	Actual	Percentage	Expected	Actual	Percentage	Expected	Actual	Percentage	Expected	Actual	Percentage	Expected	Actual	Percentage
				College			Normal School			Professional School			Teaching			Business			Trade			Home		
Highest tertile	82	102	41	41	37	30	13	3	8	39	45	39	28	22	27	20	10	16	14	19	46
Middle tertile	82	83	33	41	37	30	13	16	40	39	29	25	28	28	33	20	22	34	14	15	37
Lowest tertile	82	62	26	41	47	40	13	21	52	39	43	36	28	36	40	20	29	50	14	7	17
Highest quartile	62	83	33	30	26	21	10	3	8	29	37	31	21	14	16	15	9	15	10	8	19
Second quartile	62	64	25	30	35	29	10	7	18	29	24	20	21	21	25	15	10	16	10	21	51
Third quartile	62	63	25	30	24	20	10	13	32	29	25	21	21	29	34	15	23	38	10	7	18
Lowest quartile	62	37	17	30	36	30	10	17	42	29	31	28	21	22	25	15	19	31	10	5	12

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Table IX brings together all the facts for the purpose of facilitating comparison of the various groups. This table is prepared as follows. The total number of students who went to college, namely 247, is divided in the upper part of the table into three subdivisions, in the lower part of the table into four subdivisions. The numbers set down under "Expected" show how many would appear in each subdivision if the college group were uniformly distributed throughout the various grades. Thus if the students who go to college were of exactly the same type as the whole group we should expect 82 in the highest third, and 62 in the highest fourth, etc. Under "Actual" is set down the number of students in each subdivision. Thus there were 102 students out of the highest third of the total 735 under consideration who went to college. This is twenty-two more than might have been expected if the college group had been of the average type. The 102 students in the first third constitute 41 per cent of all those who went to college.

The tables and charts show first that the group of students who go to college is larger than any other group and that the students belonging to this group are distinctly above the average.

The normal-school group is made up more liberally from the lower grades.

The professional-school group is small. The reason for the small size of this group is the fact that the professional schools are more and more requiring for admission college courses or special preparation after high school.

The other groups exhibit characteristics which are evident from the tables and call for no special comment.

CONCLUSIONS

Many conclusions are suggested by the facts reported above. The different vocations evidently attract different types of students. The college is conspicuous in its close relation to the high-school course. The preparation for the other vocations is less direct, and the facts suggest questions regarding the meaning of a high-school course. With reference to the normal-school group it should be pointed out that similar studies from different parts of the country are very much needed in order to show whether conditions in New York state are typical.

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THE TRAINING OF HIGH-SCHOOL TEACHERS[1]

CALVIN N. KENDALL
Commissioner of Education, New Jersey

The extraordinary growth of high schools creates a constantly increasing demand for teachers. The supply of available college graduates, professionally trained and untrained, apparently keeps up with this demand. In some of the men's colleges, however, the number of those who look forward to teaching school is far less than twenty years ago. In times of business prosperity, young men leaving college are naturally attracted by commercial pursuits. Last year 277 new high-school teachers, including those of industrial or technical subjects, were employed in New Jersey alone. From the colleges of the state were graduated last June not more than five young men who became teachers in public schools anywhere.

It is to be borne in mind that many high schools are in small cities and towns, where salaries are low. Large cities, where salaries are more respectable, can, of course, require more training from candidates for high-school positions.

In this paper it is assumed that there are four possible means of training high-school teachers. These are: first, academic training; second, study of education; third, observation of teaching; fourth, practice teaching.

It is desirable that a high-school teacher should have the scholarship represented by a degree from a college or university. The state of California demands of teachers without experience one year of postgraduate study. It is the only American commonwealth, so far as I know, whose standards in scholarship for secondary teachers approach the standards of German schools. We all know, however, effective and valuable teachers in high schools who are not possessors of degrees, or whose scholarship is of the self-made variety, among whom are some who have been promoted to

[1] Address before the Association of Colleges and Preparatory Schools of the Middle States and Maryland, November 26, 1912.

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the high school from the ranks of elementary teachers. Many of the normal schools throughout the country are doing creditable work in the training of teachers for secondary schools. Most of these teachers, however, find their way into the smaller high schools. That broad and accurate scholarship, however obtained, is a great factor in successful teaching is a commonplace universally recognized. Before postgraduate standards for secondary teachers can be made to obtain generally, it will be necessary to offer considerably larger financial inducements to such teachers than usually prevail. This cannot be said with too much emphasis. It is a condition that lurks in the background of any discussion concerning how much training it is practicable to demand.

Specialization in subject-matter is often too narrow on the part of college graduates who wish to teach. The opinion is expressed that overemphasis upon specialization is not well for the student as an individual. It usually does not add value to the graduate as a teacher in the high school, large or small. In the exigencies of high-school program-making it is often necessary to assign more than one subject to a teacher.

The secondary teachers of Germany and France must show mastery for teaching purposes in at least three subjects; one of these must always be in the vernacular.

I know of a superintendent of schools who went to an important university in quest of a high-school teacher of botany. He was asked at the well-organized bureau for the placing of teachers what particular brand of botany the teacher would be called upon to teach. It was an embarrassing question. The inference was natural that upon the answer to the question would depend the presentation of candidates.

Is it too much to say that prospective teachers should be guided by college faculties to choose as subjects of study groups of related or allied subjects? Obviously this "steering" cannot be done unless the college is in close touch with the actual demands of the high schools.

Courses in education afford another means of training. These courses are now generally offered in colleges and universities. Perhaps further progress in this kind of training must be looked

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for chiefly in increasing the supply of well-trained and able men to conduct the courses.

The worth of such courses may be said to consist in the creation of a professional outlook or attitude toward the work of the high school. Neither the public nor the great mass of teachers is inclined to regard teaching as a profession. The withdrawal of a teacher to enter another occupation, so common in this country, is very rare in the German schools. "It is the professional spirit which every German teacher feels, that differentiates him from his species in the other countries, and this spirit is the result chiefly of training in education itself."

The discouraging indifference concerning educational questions which characterizes some high-school teachers is less likely to be found among those who have had courses in some of the problems of the secondary school, in psychology applied to teaching and in social education. Young teachers with a theoretical knowledge of one or more of these problems approach, as a rule, the work of the high school in a different state of mind from those in whose consciousness there is no glimmer of the existence of such problems.

The value of courses in education is also likely to be determined as the value of other courses is determined, by the character of the teaching in the department of education. Interest and enthusiasm must be created. The value of such courses is likewise determined by the attitude of other departments toward the education department. The department of education must not be merely tolerated; it must be supported as cordially as other departments. It is said to be a fact that in the past the school of education has not always been looked upon with respect by other departments. In proportion as this attitude is reflected in the minds of prospective teachers, the work in education is handicapped.

The professor who scoffs at the study of education is likely to be the man who complains the loudest about the inadequate preparation of students for college. He overlooks the fact that some of this inadequate preparation is the result of untrained college graduates in the high schools, for one of whom he may have written a glowing letter of recommendation as to his classroom ability. It would be interesting to see this type of the educational stand-

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patter, the despiser of methods, attempt to teach a class of grammar-grade boys and girls. Most high-school pupils are still boys and girls.

The third means of training high-school teachers is observation of teaching in schools in the neighborhood of the college or university, or on the university premises. Such observation may be of much value. This, however, is determined by the kind of teacher whose work is observed. College teachers of education are by no means oblivious to this fact. As the head of the educational department in an important university has put it: "I am convinced that it is easily possible to observe work in schools and still make very little gain. Unless the teacher has had ample opportunity to see superior teaching done in the high school, I am inclined to believe that the work will quickly drop back to the standard of excellence attained in the high school which the teacher attended."

Discrimination here is greatly needed. "If the teacher is to be observed as a model, he must not illustrate to the student how not to do it." Fine teachers cannot be found easily. They must be hunted out or discovered. To bring prospective high-school teachers into contact with able teachers in action is an end abundantly worth while. High standards of work must be established at the outset. The standards of too many teachers are low, because they have not been brought into sufficient contact with the fine art of teaching.

The prospective history teacher who observes the work of a teacher of history who talks too much, who lectures too much, who fails to discriminate in the choice of material, who is indefinite in his requirements, who cannot arouse interest or enthusiasm, who for these and other reasons fails to get hard work from pupils, is establishing for himself low standards.

The opinion is expressed that time is wasted by misdirected or underdirected visiting of schools. Interpretation of the work of the teacher observed is necessary to the prospective teacher. Passive observation without interpretation is of little value. Mere destructive criticism of the teacher's work, of a school, or a system of schools, for that matter, is cheap because there are so many ready to supply it.

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The University of Wisconsin has recently, under the authorization of the state legislature, established what is known as the Wisconsin High School of the University. The university, because of its independent control of the school, is able to place carefully selected and presumably highly efficient teachers in each teaching position. The project is a commendable one, and its development is sure to be of interest to all engaged in the work of training secondary teachers.

The number of well-thought-out and well-regulated plans of observation teaching in connection with education departments appears to be increasing.

Thus far I have mentioned three of four possible ways of training high-school teachers. To these should be added a fourth kind of training, if the teacher is to be trained according to professional standards.

I refer to practice teaching. The college or university which supplements its pedagogical course and courses in observation by practice teaching is rendering a distinct and much-needed educational service, provided this teaching is under competent guidance or direction. This practice teaching is the laboratory where theory is tested. The practice school has not been developed as rapidly as its value warrants. Nothing is more firmly established than the practice school in the preparation of elementary teachers. Why not, then, for high-school teachers? Practice teaching gives confidence to the student which comes from successful doing. It gives him the point of view of the real teacher. What is this point of view? I believe it is this: Consideration of the pupil as the end of education, the subject of study as the means to be employed in his training.

Some high-school teachers, fresh from college, reverse this order. In their minds the subject is uppermost, the pupil undermost. Some high-school teachers are unable to adjust their teaching to the immature minds of pupils. By reason of this maladjustment, they consequently fail to arouse the interest of pupils, who leave school, not because they have to, but because they want to.

If the teacher goes into the high school without experience, he may become proficient, but it is more or less at the expense of the

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pupil. High-school teachers who have been merely students of educational theory have had no opportunity to test the value of their theory. They should have this opportunity, using educational theory as a background. A co-ordination of theory and practice, with accompanying observation, furnishes an ideal training.

The work in practice should be real teaching. Children should not merely be practiced upon. The work is stimulating and interesting to the student-teacher in proportion as it is real. The young teacher as a rule responds quickly to the sympathetic, intelligent criticism which the practice school affords. He forms a habit in the practice school of making the work of each recitation as effective as possible. He gradually becomes a critic of his own work. This attitude he is likely to carry with him into his permanent work. It is at once the attitude of a profession and of ambition. In the small schools there is little or no supervision of secondary teaching. In the larger schools this supervision is often inadequate. Too often the teacher must "go it alone." A blunder under these circumstances is repeated indefinitely at the expense of pupils. A blunder in the practice school can be pointed out before night.

In spite of the excellent work that is done by large numbers of high-school teachers throughout the country, there is, speaking dogmatically, too much misdirected effort on the part of some teachers who are graduates of colleges. The trouble is that they have had no opportunity to learn to teach. It is natural that, fresh from college, they should be inclined to use the method employed with college Seniors of twenty-two upon the immaturity of first-year classes—children of fifteen. These conditions being true, it is not strange that the teacher and the pupil do not always understand each other, and that the teaching is not adapted to the children. Under the circumstances the children lose interest. The teacher, entirely conscientious though he be, becomes disheartened. He wonders why the pupils, as revealed in the tests, have got so little from his instruction; no small part of which has, perhaps, been given from his chair back of the desk. Too often the children work the teacher, when the teacher should work them.

In spite of the excellent work done in English, history, and

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physics in the high schools, these are among the subjects which suffer most from maladjustment. Of all the crimes in the educational calendar, the forcing of adult standards upon children is among the worst.

All of this is not a reflection upon the teachers or colleges. It is merely a statement of existing conditions which will be made better, not all at once, but gradually, as the need of better-trained teachers is more fully realized, as salaries become better, and as colleges and universities find the way to establish schools of practice.

A teacher trained by means of a combination of theory, observation, and practice is more ready to be directed by the principal, superintendent, or the head of the department, assuming that principal, superintendent, or head of department is in action. Such a teacher realizes that most high-school pupils are still children, boys in short trousers and girls in short skirts. Such a teacher is likely to read a book like Chubb's *Teaching of English*, or Bagley's *Educative Process*, or Sachs's *The American Secondary School*, or James's *Talks to Teachers*, with some interest. Such a teacher is not likely to neglect teachers' conventions or associations. Such a teacher is likely to realize that the last word in education was not said fifty years ago.

The boys and girls in our high schools compose a great miscellaneous class, who come from all conditions of homes. Few will go to college. Two or three generations ago secondary pupils usually came from homes in which there were some traditions of culture. Because of this and other reasons which cannot be pointed out in the limits of this paper, the simplicity of the former school has been succeeded by the complexity of the modern school. A new sort of teacher is, therefore, demanded, if all these young people are to be trained, and not merely some of them. They need teachers who recognize differences in individuals; teachers who are open-minded to new ideals in education made necessary by new social and economic conditions.

There is abundant evidence that college teachers of education are convinced of the need of training by means of schools of practice. Such training, wherever it is possible to bring it about, would not only result in better teaching in the high school, but it

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would also vitally influence the standards of the large number of young women who go from the high schools into the elementary schools by way of the normal schools. It would, therefore, be of indirect value to the multitude of children in the elementary schools. Mr. Carnegie could not do a better thing for education than to furnish $25,000 a year for the maintenance of a good school of observation and practice, in connection with a university.

Large expense, however, is not necessary in making the beginnings of a practice school. A combination between high schools and the college or university, for the purpose of providing training facilities, is possible, because it has already been made, as will be shown later.

Administrative difficulties are in the way, it is true, but in a measure they may be overcome. Dr. John P. Brown, in his excellent book *The Training of Teachers for Secondary Schools*, presents very clearly the possible advantages both to the department of education and to the neighboring high school, as a result of co-operation for practice. The department of education would gain because of the opportunities to test out its theories in the high school. The high school would gain because of the professional stimulus which would come to regular teachers by contact with the educational department of the college.

The possibility of this co-operation is conditioned upon adequate administration, and upon sufficient facilities for direct and abundant supervision. The pupils in the high school, whose interests are paramount, should not be made to suffer. No one would propose that an entire school be used as a practice school; only a few or some of the classes would be so used. A class taught a half-year in one subject by a student-teacher whose academic specialty is that subject would not be retarded, because the critic teacher, either from the school or from the college, would be at hand.

It is to be admitted that we are a long way from the attainment of these ends in the training of high-school teachers, but a beginning has been made.

At Harvard, in the second half-year of the course in education, each student is placed in charge of a classroom in one of the high schools in Cambridge, or in a selected neighboring city. He

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teaches the class under the common conditions of classroom work. He teaches three to six periods a week for a half-year, having full responsibility for the work of the class. The student is under the double supervision of a member of the department and a representative of the local school system.

Since 1908 there has been an agreement between Brown University and the city of Providence for the training of teachers by means of practice in the city schools. Candidates must have a degree from a reputable college or university. There are two types of the student-teacher. Students of the first type teach part time, and are paid by the city at the rate of $400 a year. Students of the second type must accomplish 125 hours of observation, individual instruction, and class teaching, in a year. These are not paid. The work of all these teachers is under the supervision of a representative of the department of education, and of the city schools.

At Indiana University an agreement for practice teaching has been made between the university and the city of Bloomington, in which the university is located. Definite requirements are made of teachers before they are admitted to the practice schools, such as the maturity of judgment represented by Senior or postgraduate standing in the university, and a knowledge of general pedagogical problems. The student-teacher enters upon his work in the local high school in one of the following subjects: botany, English, history, mathematics, physical geography, or zoölogy. He works under the direction of a well-trained critic teacher. The general supervision of the whole critic school is delegated to the high-school principal, working in co-operation with the head of the department of secondary education. The student teaches one period daily, one-half of the school year. He also enrols pupils, looks after class records, grades manuscripts, and performs in short all the phases of a regular teacher's duties. It is real teaching, both in intent and in result.

In California, as before pointed out, there must be one year of postgraduate work for inexperienced teachers, one-half of which is spent in the study of education, which usually includes practice teaching. Opportunities for practice teaching may be had either in selected high schools or in the normal schools of the state.

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In an important city, half a dozen college graduates are trained each year in the grammar grades, under competent critic teachers. These young women are selected with care. They are paid moderately for their services during the half-year of their service, which is real teaching. Eventually most of them become teachers in the high schools, where their ability is recognized.

There is abundant testimony from those out on the firing-line—namely, superintendents of schools—as to the value of practice training for secondary teachers. Superintendents in a typical progressive middle western state were recently asked to express their opinion as to the value of practice training. Eighty-two out of eighty-four expressed themselves in no uncertain terms as to the need for such training.

I quote from letters from superintendents of schools in widely separated but typical parts of the country. Says Superintendent Van Sickle, of Springfield, Mass.:

> There is no greater need anywhere in the service than in the high schools, for thoroughly trained teachers. There is no doubt in my mind that much of the mortality in the early high-school years is due to bad teaching; not all, of course, but a good deal. In cities like Springfield, and in large cities where the salaries are such as to enable school boards to attract high-school teachers from the smaller places, teachers can be had who by a few years' experimenting on children have developed a satisfactory method.

Says Associate Superintendent Wheeler, of Philadelphia:

> We have no difficulty in securing college graduates who are well equipped with knowledge of the subjects which they desire to teach, but we find practically none who have received any training in the *teaching* of those subjects. Fortunately, we are able to secure many who have learned to teach by teaching in other places.
>
> But the fact remains that scarcely one has been trained to teach. What high-school teachers know about teaching is almost invariably learned after they have been appointed. The colleges ought to give the prospective high-school teacher definite training in the profession of teaching.

Says Superintendent Blewett, of St. Louis:

> I believe that we still have a very great weakness in our high-school work because of the lack of specific professional training of the teachers in these schools. Many of our experienced grade teachers have a very much greater skill in presenting the subjects with which they are familiar because of their better pedagogic training, because of a too narrow scholarship in the special subjects they would be called upon to teach in the high schools.

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Says Superintendent Frank Cooper, of Seattle:

> My own view is that high-school teachers need to be trained away from college and university standards for young people. It should be made clear to them in some way that the college or university method, while good for men and women, is not suitable for boys and girls. They should be diverted early from the idea that specialization is a saving function in the high school. In many instances the high-school teacher does not become a specialist, but a routinist. They teach one thing and teach it five times a day, acquiring facility and dexterity, but sacrificing inspirational and cultural effects. What we want in high-school teachers is power to use subject-matter as an instrument, personality, and the kind of professional spirit that warms up to man-making through teaching.

It would be possible to quote similar expressions indefinitely.

I have not attempted to discuss the training of teachers for the various phases of industrial training, which is becoming so important a part of the work of so many secondary schools.

This is the conclusion I wish to express: That of the four kinds of possible training for secondary teachers—the academic, courses in education, observation, and practice teaching—the first three are in the main satisfactorily carried on. The last, practice teaching, has not been developed as the needs of the schools demand. Opportunities for practice are available only to a limited extent. An extension of these opportunities is necessary if there is to be a real, vital preparation for teaching, as for a profession, and for increased efficiency in the high schools.

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THE ASSOCIATION OF COLLEGES AND SECONDARY SCHOOLS OF THE SOUTHERN STATES[1]

CHANCELLOR J. H. KIRKLAND
Vanderbilt University

The Association of Colleges and Preparatory Schools of the Southern States held its first meeting in Atlanta, Ga., November 6, 1895. This is, therefore, the eighteenth annual meeting. Perhaps at this time it will not be amiss to renew briefly the way we have come, to consider the tasks already undertaken and in part accomplished, and to note the work still remaining for us to do.

It was a small group of men that met in the chapel of the Georgia School of Technology seventeen years ago. Sixteen delegates were present, representing twelve institutions. No speeches were made. There were no outbursts of eloquence, for there was no gallery to play to. But there was much earnest discussion. A serious tone pervaded the gathering. Men discussed the educational situation in the South with frankness and sincerity. Each delegate spoke of his own institution, not to laud or magnify, but to set forth its weaknesses and its shortcomings. In considering the possible organization of an association it was recognized that there was no need of a general educational gathering. Such needs were already supplied, and we had no desire to add to the list. We did have in mind an annual gathering where the peculiar problems of schools and colleges might be discussed and illuminated, but we had also a more distinct purpose than this. The new association was to be a group of institutions pledged to certain standards. It was a compact. Membership in the association was not an honor, but an obligation, the observance of which was not without its inconvenience and cost. The fundamental principles of the association were embodied in the constitution and by-laws, and there was a pledge, either expressed or under-

[1] President's address delivered at Wafford College, Spartanburg, S.C., November 15, 1912.

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stood, that the provisions of the by-laws should be observed. At the same time, care was taken that these provisions should be few in number and of reasonable import. The association has never sought to interfere with the freedom of each institution. The colleges and universities constituting its membership represent varying types and differ in a score of particulars. The points on which uniformity has been demanded have been a few essential principles accepted and approved by all. We have exercised a wise self-restraint, and no complaint has ever been made of unjust legislation. No institution has ever withdrawn from our association through a sense of wrong done or a lack of sympathy with our purposes. The single withdrawal of a college once a member was occasioned by the increase in our requirements, and the institution so withdrawing has continued to affiliate with us.

While our association was formed for the purpose of general co-operation in all the work of school and college, yet our attention was first directed to one particular task, the adjustment of the relationship between the high school and the college. At that time most colleges conducted preparatory classes. Students left the high school at almost any stage of their preparation and applied for admission to college. If it appeared excusable they were admitted to the Freshman class; if this seemed impossible they entered one of the sub-Freshman classes. The effect of such a practice on the schools can easily be imagined, and indeed is well remembered by most of us. There was no opportunity left for independent school work of a high grade. Colleges and schools competed for the same students, and unfortunately the colleges won in too many cases. While this state of affairs still persists to some extent among some institutions, there has been great improvement in the past seventeen years. To meet this condition was our first task. Our plan of attack was along three different lines.

In the first place, a by-law was adopted prohibiting all preparatory classes. The subclasses in English, mathematics, Latin, and Greek, so characteristic of every institution, were declared intolerable. This experiment had been tried with marked success at Vanderbilt University seven years before the organization of

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the southern association, and Vanderbilt's experience was a great encouragement to other institutions. Without this we should hardly have been bold enough to advocate such a reduction in attendance. It was believed that if a few could be found willing to take such a step their experience would commend this action to others. We looked also to the schools to bring some pressure to bear on the colleges and throw their support to those institutions that left to the schools a field in which to live and work.

In the second place, we undertook to define the admission requirements for the Freshman class. These requirements seem now extremely low, but at that time it was not easy for many institutions to meet them, particularly as no subclasses were left to catch the unprepared. The requirements covered the subjects of English, Latin, Greek, mathematics, and history. In English we accepted from the beginning the national standard, then known as the requirement of the Association of Schools and Colleges in the Middle States and Maryland. In Latin our requirements measured about $2\frac{1}{2}$ units, in Greek a little less than 2, in mathematics $1\frac{1}{2}$, and in history 1. These amounted altogether to nearly ten units, provided the student proposed to take all these subjects. But no substitutes were demanded for Latin and Greek in case the student did not take the classics. All such students could enter on $5\frac{1}{2}$ units, and irregular students could even be received on English and history alone, equal to 4 units. No doubt these irregular or non-classical students had studied other subjects, but there was no well-defined or accepted substitute for Latin and Greek that could be counted on; therefore, our association made no provision for other subjects than those named.

In the third place, colleges belonging to the association were required to hold entrance examinations of the scope above indicated and to print their questions, depositing copies with the secretary of the association. In this way publicity guaranteed security, as in the management of the trusts. Papers unreasonably easy were an object of ridicule. As these papers went into the hands of teachers, they offered a basis on which the work of the college might be appraised. Not only the entering Freshmen were graded on these papers, but the professors and the colleges as well.

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Certificates were allowed from the beginning. No attempt was made to force examination of all students. But it was assumed that a considerable number of students would be examined. In the absence of reliable high schools, public or private, it was supposed that only a few students would be able to bring satisfactory certificates. We did not then foresee the rapid growth of public high schools and the universal rebellion on the part of pupils and teachers against the hardship and indignity of entrance examinations.

With these explanations it is not hard to understand that few institutions were ready to accept the regulations agreed on. Only six colleges entered into the compact, viz., Vanderbilt University, the University of North Carolina, Sewanee, Mississippi, Washington and Lee, and Trinity College. Even these were secured through concessions. The general requirements were not to become effective until September, 1897, and the requirement in Greek in 1898. Thus, and thus only, was the southern association brought into being.

As a matter of fact, the requirement in Greek never became effective. A strong effort was made to have Greek taught in our schools so as to enable us to enforce our entrance requirement, but without success. At the second meeting of the association in 1896 three papers were presented on the study of Greek, one by Vice-Chancellor Wiggins of Sewanee. Even then the suggestion had been made that Greek should be begun in college, but Dr. Wiggins opposed this vigorously. The next year a series of reports was presented on the requirements of the association and the methods of study in various subjects. That on Greek was prepared by Messrs. Wiggins, John M. Webb, and Bocock. This report declared that the existing requirements in Greek, viz., three books of the *Anabasis*, were reasonable and could soon be met. In the discussion President Raymond of the University of West Virginia made a strong plea for beginning Greek in college. While we were all discussing the reasonableness of the requirements in Greek, Professor P. H. Saunders of the University of Mississippi was getting ready to meet them. His work was described in a paper presented to the association in 1899. Pro-

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fessor Saunders gave courses in Greek to the teachers of Mississippi at the summer normal. He also opened a correspondence course, and by his personal influence secured pupils for it. At the time of his paper in 1899, forty-four schools were teaching Greek, and thirty-one had been affiliated with the university in that subject. Twenty-eight students met the requirement for admission to the Freshman class in Greek in 1899, and seven others were only partially deficient. Unfortunately, Professor Saunders stood almost alone in this work and the requirements of the association were postponed year by year. Finally, in 1902, the association adopted by-laws, unchanged in this respect today, placing Greek with French and German and allowing all of them to be begun in college. In this matter of Greek the plans of the association failed. We were trying to stem a tide too strong for us and wisely decided to yield to the inevitable with grace and promptness. None the less do we admire and honor those schools that still retain the study of Greek and those colleges that still demand classical attainments for the A.B. degree.

Let us now consider other changes that have been made in the program of the association with passing years. At the eighth annual meeting held in 1902 the requirements for admission were revised, and French, German, and science were introduced. Candidates for A.B. offering Latin and Greek were not disturbed by the new rules, but non-classical students were now required to offer English, 3 units; mathematics, 1½ units; modern languages, 4 units; history, 1 unit; science, 1 unit; total, 10½ units. This was approximately equal to the demands made on classical students. The demands made on irregular students remained pitiably weak, not more than 5½ units.

Inasmuch as colleges were now allowed openly to furnish preparatory instruction in French, German, and Greek, it was evidently impossible longer to enforce the first by-law which forbade this entirely. This by-law was therefore amended by adding the words "except as allowed in section 3 below." At a later date, in 1908, when the association adopted the present by-laws effective in 1910, the rule was changed so as to forbid a regular preparatory department conducted as part of the college

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organization. The rules of the association on this point become less important as the admission requirements are increased. If every student entering college presented fourteen units, without condition or deficiency of any kind, it would not be necessary to provide any measures against preparatory classes or departments. But one main purpose of our association has always been to foster and protect high schools, and colleges should not be allowed to enrol students for the completion of their high-school course, providing suitable classes for that purpose. The spirit of our laws may be thus interpreted: No student entering college on less than fourteen units, satisfactorily and completely passed, should be allowed to enter any classes for the sake of making up his conditions except in Greek, French, or German, and no classes other than these should be maintained for that purpose.

In another particular the rules of the association have suffered a change. At first each institution was required to print its entrance examination papers and file copies with the secretary. This law is not part of our present requirements. Two causes have brought about the change. Since May, 1905, we have printed a general set of examination questions and circulated them in the name of the association. Members of the association have set these papers as their own. But in addition to this fact, there has been an almost entire abandonment of examinations as a means of entering college. It would be of interest to know just how many students entered college on examination this year among all our members. Vanderbilt has been trying to hold to its traditions, but we do so with increasing difficulty. At present we are falling back on a compromise measure, examining chiefly on the work of the last year and accepting certificates for the earlier years. This general abandonment of the examining system seems to make it unnecessary and undesirable longer to continue our practice of printing examination papers. If these papers are not used by the colleges there is no sufficient justification for their publication.

The latest step in our development as an association was taken in 1908, and consisted in the adoption of new requirements for admission, which became operative in 1910. Every institution belonging to the association must now require fourteen units for

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admission to any degree course in its literary department. Irregular students must offer at least ten units. The association now has practically no other requirements than these. Colleges make their own regulations as to the specific subjects demanded and as to their treatment of deficient students. The association does not interfere here with regulations. Still, the way is open for discussion, for counsel, and for warning, and we may be of service to each other without the enactment of laws. Certainly the question of standards is affected distinctly by our attitude on these points.

We have now briefly surveyed the progress we have made since the formation of our association. It has not been startling, but it has been steady. We have held fast to our ideals and we have not gone backward. We have exercised a wholesome influence on higher education in the South and we are approaching national standards in school and college work. And we shall not cease nor shall we be satisfied until we attain them.

The task immediately before us is the development of a sensible, reasonable system of certification. This will require faithful work for a number of years. If all students are to be received by the colleges on certificate, then it is surely incumbent on us to see that the certificate has a definite meaning, that it is in satisfactory form, that it is a guaranty of a worthy high-school course behind it. The list of accredited schools ought to be a roll of honor, and we must make it so. Certificates constantly accepted at the present time in fulfilment of our entrance requirements are often meaningless and worthless. But there are other tasks that await us, and I make bold to suggest some of them.

Our requirements for admission need further amendment in the near future. We must not deceive ourselves with the claim that we have adopted a fourteen-unit standard. The significant fact remains that students may be and are received on ten units. It is possible to enter our Freshman classes with less than three years of high-school work. Are we not ready to put a stop to these minimum requirements? Ought we to put a premium on the worst form of college course, viz., the irregular course, and invite callow youths to leave the high school after two years to

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enter college? My proposition is that no student be received whose certificate does not show twelve units satisfactorily completed. No conditions or deficiencies should be allowed below twelve units. This means at least the completion of a three-year high-school course. Between twelve and fourteen units is the field for conditions, for we must adhere to fourteen units as the full requirement for admission. The deficiencies of any entering student should further be taken into account in arranging the work of the first year. The chairman of the entrance committee should have authority so to arrange and limit this work that all these deficiencies be made up during the year and before the student is allowed to matriculate for his second year. Let the student thus deficient be treated as on trial and only partly a matriculate. He should not be allowed to represent his college on athletic or other teams nor to join a fraternity. His attention should be kept strictly to study until he has made good his deficiency. While some of these suggestions are not suited for incorporation in our by-laws, I fully believe we are now ready to adopt an absolute minimum standard of twelve units without conditions of any kind.

I am further of the opinion that in recommending schools and colleges for membership in the association the executive committee should have some discretion outside of the few rigid restrictions imposed through our by-laws. There are tests of eligibility that cannot and should not be made into fixed enactments. I should also like to see provision made for receiving individuals as members of the association on payment of two dollars as an annual fee. This I would do without giving them the right to vote on constitutional amendments. I would increase the annual dues of colleges and universities to ten dollars, leaving schools to pay five dollars as at present. All these suggestions might be covered by a few changes in our constitution, as follows:

ARTICLE II

SECTION 1. The members of the association shall consist of three classes: first, colleges and universities; second, schools; third, individuals.

SEC. 2. Election to membership shall be only at regular annual meetings and on recommendation of the executive committee, which committee shall judge of the eligibility of an institution in matters not explicitly covered by

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the constitution and by-laws. The character and tone of an institution are factors of consequence in determining eligibility.

SEC. 3. In transacting the ordinary business of the association all delegates present shall be entitled to vote, but amendments to the constitution and by-laws shall only be made by the first two classes of members, each institution having one vote.

ARTICLE VI

To meet the expenses of the association an annual fee of ten dollars shall be paid by each college or university; five dollars by each school; and two dollars by each individual member. Failure to pay dues for two years in succession forfeits membership.

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Fourteen units are required of all students admitted to college. Conditions are allowed to the extent of two units only, and all conditions or deficiencies must be removed during the first year in college. College work taken to remove conditions must not be counted toward a degree.

The southern association has had a creditable history. It has held fast to a definite line of work, and has exercised a strong influence on standards of higher education in southern institutions. Its task is not yet accomplished. We cannot be true or useful unless we recognize present duties and present tasks. Some of these have been set before us in this paper and will doubtless be met by the association in the same spirit in which it has undertaken other improvements.

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GEORGE MEREDITH'S INTEREST IN EDUCATION

LUCY HEALD
Cambridge, Massachusetts

"He who's for us, for him are we!" These words from one of George Meredith's poems may well be applied to the proper attitude of teachers toward all who by public words dignify the profession of teaching. Yet it is probable that few teachers outside an English department realize his claim to our gratitude and attention. Fiction is not popularly associated with information and argument. To be sure, we have in *Nicholas Nickleby* a classic example of fiction dealing with education. But this illustration is usually forgotten when fiction is classified. Names of professional psychologists less acute than Meredith are doubtless familiar to a larger group of teachers than is his name. His critics have ascribed to him an ethical purpose, a habit of combining with relation revelation, and such purpose is evident to the casual reader, even. His *Letters* frankly confess the reformatory nature of his work, the most complete expression of which purpose is found in a letter to Professor George P. Baker of Harvard:

> I think that all right use of life, and the one secret of life, is to pave ways for the firmer footing of those who succeed us: as to my works, I know them faulty, think them of worth only when they point and aid to that end. Close knowledge of our fellows, discernment of the laws of existence, these lead to great civilization. I have supposed that the novel, exposing and illustrating the natural history of man, may help us to such sustaining roadside gifts.

The special subjects that Meredith intended to emphasize in his writings were admitted to be, in an interview with Mr. Foster Watson,[1] education and the emancipation of woman. There is a class of critics who, though acknowledging the importance of such subjects, object to the use of even such important subjects in fiction, which they claim to be primarily a form of art, a mere reproduction of life. Meredith himself discredited this narrow function of

[1] "Meredith and Education," *Nineteenth Century*, LXVII.

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fiction, as is shown in the introductory chapter of *Diana of the Crossways;* here he describes imaginatively yet frankly the nature of "the novelist's Art, now neither blushless infant nor executive man," when it shall

> have attained its majority. We can then be veraciously historical, honestly transcriptive. . . . . Honourable will fiction then appear; honourable, a fount of life, an aid to life, quick with our blood . . . . be wary of the disrelish of brainstuff. You must feed on something. . . . . Brainstuff is not lean stuff; the brainstuff of fiction is internal history, and to suppose it dull is the profoundest of errors. . . . . As much as legs are wanted for the dance, Philosophy is required to make our human nature creditable and acceptable. Fiction implores you to heave a bigger breast.

"Honourable" must fiction of Meredith's purpose be. Such fiction is useful not only to the English department. Meredith's writings merit the attention of all teachers. His most eminent critic, Mr. George Macaulay Trevelyan, the historian, says regarding the charge that "Meredith has exaggerated the importance of considering future generations"

> he has only filled up a void left by too many others. . . . . our duty to the future that we shall not see is associated in our minds with Mill rather than with Wordsworth, with Herbert Spencer rather than with Dante. This is not as it should be; and Mr. Meredith, in his capacity of poet and poetic novelist, has done what he could to apply a remedy. . . . . Mr. Meredith thinks that the irresponsible rich do not take as large a part as they should take in the various activities that regard the coming generations—the rearing of families, social reform, artistic creation, the endowment of educational and other public institutions, and the ordinary economic production on which society rests.
>
> All these things
>
> Keep the young generations in hail,
> And bequeath to them no tumbled house.

Obscurity of style is probably associated with Meredith's name as intimately as are the titles of his books. This disadvantage must be one reason why his social ideas have not become better known. The two topics that I have mentioned as the themes about which he is most in earnest are combined in the novel named *Lord Ormont and His Aminta.* This belongs to a series of four novels produced within a decade and all dealing with the difficulties caused by unsuitable marriages. The educational plan, which is the secondary

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theme, suffers from its connection with the main theme; it is difficult to believe whole-heartedly in the success of a school, the headmaster of which has eloped with another man's wife. In this case not only the style but the author's specific solution for the difficulty that he very clearly exposes is obscure. But the plan for the ideal school shows imagination and originality. I shall quote Meredith's own words describing this school, because these passages are not only intelligible but graphic.

The opening chapter of *Lord Ormont* contains a description of a snow-fight between two teams of a boys' school, witnessed by a girls' school, and includes this interesting comment:

> Those girls had a leap and a fall of the heart, glad to hug themselves in dry clothes, and not so warm as the dripping boys were, nor so madly fond of their dress-circle seats to look on at a play they were not allowed even to desire to share. . . . . The thought of the difference between themselves and the boys must have been something like the tight band—call it corset—over the chest, trying to lift and stretch for draughts of air.

This passage is indicative of Meredith's outcry against many conventions that hamper the female sex. The hero of this novel, Matthew Weyburn, gives his reasons for his choice of teaching as a profession as follows:

> "Why did you not enter the service?"
>
> "Want of an income, my lady."
>
> "Bad look-out. Army or Navy for gentlemen, if they stick to the school of honour. The sedentary occupations corrupt men."

> "Her mind was very clear up to the last hour upon all subjects interesting her son. She at one time regretted his not being a soldier, for the sake of his father's memory. Then she learned to think he could do more for the world as a schoolmaster. She said you can persuade."
>
> "We had our talks. She would have the reason if she was to be won. I like no other kind of persuasion."

> "I can hardly understand a young Frenchman's not entering the army," she said.
>
> "The Napoleonic legend is weaker now," said he.
>
> "The son of an officer!"
>
> "Grandson!"
>
> "It was his choice to be—he gave it up without reluctance?"
>
> "Émile obeyed the command of his parents," Weyburn answered; and he

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was obedient to the veiled direction of her remark, in speaking of himself: "I had a reason, too."

"One wonders!"

"It would have impoverished my mother's income to put aside a small allowance for me for years. She would not have hesitated. I then set my mind on the profession of schoolmaster."

"Émile Grenat was a brave boy. Has he no regrets?"

"Neither of us has a regret."

"He began ambitiously."

"It's the way at the beginning."

"It is not usually abjured."

"I am afraid we neither of us 'dignify our calling' by discontent with it!"

A dusky flush worth seeing came on her cheeks. "I respect enthusiasms," she said, and it was as good to him to hear as the begging pardon, though clearly she could not understand enthusiasm for the schoolmaster's career.

"I have the belief that I shall succeed, because I like boys, and they like me. . . . . I have my boys already waiting for me to found the school . . . . in Switzerland."

"When?" said Aminta.

"A relative from whom a reversion comes is near the end. It won't be later than September that I shall go. My Swiss friend has the school, and would take me at once before he retires."

"You make friends wherever you go," said Aminta.

"Why shouldn't everybody? I'm convinced it's because I show people I mean well, and I never nurse an injury, great or small. And besides they see I look forward. I do hope good for the world."

It is evident from the foregoing that Meredith felt obliged to justify, if not to apologize for, his hero's occupation. The following description of his personal appearance seems intended to surprise the reader as well as Lady Charlotte Eglett in the story:

Lady Charlotte's blunt "Oh"! when he entered her room and bowed upon the announcement of his name, was caused by an instantaneous perception and reflection that it would be prudent to keep her granddaughter Philippa, aged between seventeen and eighteen, out of his way. . . . . She did not blame Arthur Abner for sending her a good-looking young man; she had only a general idea that tutors in a house, and even visiting tutors, should smell of dust and wear a snuff appearance.

We are told furthermore of Weyburn's appearance: "He could not help his being a handsome fellow, having a vivid face and eyes transparent, whether blue or green, to flame of the brain exciting them. . . . ."

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So attractive in person and mind is Weyburn that many readers must agree with Mr. Elmer James Bailey when he says (*The Novels of George Meredith: a Study*): "The reader, when he lays down the book, is somewhat shocked to realize that he has almost unconsciously been led into approval of what society regards as an immoral situation." But the marriage problem of the book does not prevent our belief that, without relation to social ties outside the school, Weyburn and his wife were noble and original teachers. We should be grateful to Meredith for making them dignified, cultured, and ardent. This book might encourage aspiring young men to follow Weyburn's example in the choice of a profession. He is socially superior to most teachers in real life, for Lady Charlotte had suggested that he was a gentleman, in the English sense, by recommending to him the army or navy as a profession.

I will add some sentences describing the mind and soul of Weyburn:

> . . . . he was now a young man, stoutly and cognisantly on the climb, with a good aim overhead, and green youth's enthusiasms a step below his heels: one of the lovers of life, beautiful to behold, when we spy into them. . . . . Weyburn knew that a spice of passion added to a bowl of reason makes a sophist's mess. . . . . Nor had she, nor could she do more than lean on and catch example from his prompt spiritual valiancy. It shone out from him, and crisis fulfilled the promise.

"Spiritual valiancy!" Is there a more desirable quality for a schoolmaster?

Weyburn's plans for his Swiss school were noble in conception.

> "The spot fixed on is in Switzerland."
> "You will have scenery."
> "I hold to that as an influence."
>
> "If at my school we have all nationalities—French boys and German, Italian, Russian, Spaniard—without distinction of race and religion and station, and with English intermixing—English games, English sense of honour and conception of gentleman—we shall help to nationalize Europe."

He spoke to Weyburn of his prospects in the usually, perhaps necessarily, cheerless tone of men who recognize by contrast the one mouse's nibbling at a mountain of evil. "To harmonize the nationalities, my dear boy! teach Christians to look fraternally on Jews! David was a harper, but the sitting of him down to roll off a fugue on one of your cathedral organs would not impose

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a heavier task than you are undertaking." . . . . "You have beaten the Christians on the field they challenged you to enter for a try. They feel the pinch in their interests and their vanity. That will pass. I'm for the two sides, under the name of Justice; and I give the palm to whichever of the two first gets hold of the idea of Justice."

In the final chapter, an old pupil thus recommends the school:

"I was a sneak and a coward. It follows, I was a liar and a traitor. Who cured me of that vileness, that scandal? I will tell you: an Englishman and an Englishwoman—my schoolmaster and his wife. My schoolmaster—my friend! He is the comrade of his boys: English, French, Germans, Italians, a Spaniard, in my time. A South American I have sent him—two from Boston, Massachusetts, and clever! all emulous to excel, none boasting. . . . . He works for Europe and America—all civilized people—to be one country. He is the comrade of his boys. Out of school hours it is Christian names all round. . . . . But if the boys are naughty boys, it is not the privilege. Mr. Weyburn."

If I have influenced any of my readers to read *Lord Ormont and His Aminta* for the first time, I shall have accomplished something for the cause of education; but I warn any such reader that he will find the general level of the book, in spite of exquisite new passages, below the quotations I have given.

Meredith is "for us," but he can never be our champion to the extent that his ideas deserve, on account of the obscurity of his style; in the case of *Lord Ormont*, the imperfect social scheme lessens the consideration given to the educational scheme. This is hardly just.

We are in the habit of thinking adolescence a subject peculiarly interesting to teachers and defined originally by Clark University. Meredith's *Ordeal of Richard Feverel* (1859) contains a description of adolescence that, though not so accurate as our pedagogical data, gives an impression of personality that can hardly be put together out of the pedagogic list of attributes. Meredith's boys—a gallant band—all possess a distinct ego, a directing force, approaching spirituality. The diminutive hero is still heroic. Biography shows the spirit animating the energies—the canny young Franklin bent on self-improvement, the solitary Hawthorne; but in the analytic charts that we map of our pupils do we take into account this personality? I feel that children are all that the tables

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state plus something more. Meredith grants to children, even, marked personalities; to him callow youth are yet centered. Young Richard Feveril shows most of the traits we have been taught to regard as characteristic of adolescence; but beyond this there is ardor of youth, the soul of the mechanism, that has a romantic charm. We acknowledge the religious and generally emotional character of adolescence; but I have yet to find a professional psychologist that speaks of adolescents with emotion. Meredith can help us to "heave a bigger breast." I will quote in illustration from an early chapter of *The Ordeal of Richard Feveril*, a novel devoted to the subject of a father's scheme for educating his son, and therefore one of the novels that are of interest to us.

> The boy's mind was opening, and turned to his father affectionately reverent. At this period, when the young savage grows into higher influences, the faculty of worship is foremost in him. At this period Jesuits will stamp the future of their chargeling flocks; and all who bring up youth by a System, and watch it, know that it is the malleable moment. Boys possessing any mental or moral force to give them a tendency then predestinate their careers; or, if under supervision, take the impress that is given them: not often to cast it off, and seldom to cast it off altogether.
>
> In Sir Austin's Note-book was written: "Between Simple Boyhood and Adolescence—The Blossoming Season—on the threshold of Puberty, there is one Unselfish Hour—say, Spiritual Seed-time."
>
> He took care that good seed should be planted in Richard, and that the most fruitful seed for a youth, namely, Example, should be of a kind to germinate in him the love of every form of nobleness.
>
> "I am only striving to make my son a Christian," he said, answering them who persisted in expostulating with the System. And to these instructions he gave an aim: "First be virtuous," he told his son, "and then serve your country with heart and soul." The youth was instructed to cherish an ambition for statesmanship, and he and his father read history and the speeches of British orators to some purpose; for one day Sir Austin found him leaning cross-legged, and with one hand to his chin, against a pedestal supporting the bust of Chatham, contemplating the hero of our Parliament, his eyes streaming with tears. . . . . The Bread-and-water phase lasted a fortnight: the Vegetarian—a little better than a month; the religious, somewhat longer; the religious-propagandist—longer still, and hard to bear. . . . .
>
> Richard's pride also was cast aside. He affected to be, and really thought he was, humble. Whereupon Adrian [his cousin and tutor], as by accident, imparted to him the fact that men were animals, and he an animal with the rest of them.

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"An animal!" cried Richard in scorn, and for weeks he was as troubled by this rudiment of self-knowledge as Tom [the farmer's son] by his letters. Sir Austin had him instructed in the wonders of anatomy, to restore his self-respect. . . . . [he] retired into himself, where he was growing to be lord of kingdoms: where Beauty was his handmaid, and History his minister, and Time his ancient harper, and sweet Romance his bride; where he walked in a realm vaster and more gorgeous than the great Orient, peopled with the heroes that have been.

We recognize in these quotations the chief characteristics of adolescence known to pedagogy. But Meredith's presentation of them gives to the possessor a charm and a reality that our statistics cannot effect. When we read "contemplating the hero of our Parliament, his eyes streaming with tears," we think, "Noble, ingenuous boy!" Too much study of questionnaires produces an impersonal and unattractive impression of the subject studied. Meredith can teach us to study not detached attributes but personality.

A prominent character in *Richard Feveril* is Adrian Harley, the tutor. His work is not in proportion to the importance of his office. He may be dismissed with this description, that he was addicted to making jokes "delicately not decent, though so delicately so that it was not decent to perceive it."

To change comparisons for a moment, Meredith's treatment of boyhood gives it more dignity than does that of many writers of fiction. This may be seen in comparing Stevenson with Meredith. Stevenson, in describing characteristically the child's ordeal of going to bed alone, says:

> Then let us rise and go like men,
> And face with an undaunted tread
> The long black passage up to bed.

This is making fun, good-naturedly and tenderly, of a child's fears. To Meredith a child's feelings are more dignified. Possibly he errs on the side of idealizing his little heroes, but at least he is not condescending.

He thus describes the emotions of little Harry Richmond, in the novel of that name, when discovered by his grandfather's grooms on a lonely heath at nightfall; as he wandered he had had wild thoughts of running away to sea, to enlist, to search for his lost father: "I rode home like a wounded man made to feel proud by victory, but

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with no one to stop the bleeding of his wounds; and the more my pride rose, the more I suffered pain." In this fictitious autobiography Harry Richmond is of course speaking half humorously of this childhood experience, yet also with the idea of presenting to us the brave spirit of his boyhood. This attractive quality, a glowing spirit, is what I value most in Meredith's transcript of youth; I do not feel sure that he here is psychologically accurate but I believe that he points the way to what we need to recognize—intimations of spirituality in the child and youth. Our child-study seems here deficient. Personality, spirituality, ardor, these are possessed by Meredith's boy heroes. This makes good reading and is, I believe, valuably suggestive to us. We need to be emotionally affected by the young if we are to teach them well.

The Adventures of Harry Richmond contains among its minor characters the Herr Professor Dr. Julius von Karsteg, tutor to a German princess, a "man distinguished even in Germany for scholarship." His acceptance of the tutorship was an honor to the intelligence of the Princess. Through him Meredith voices his ideas on the danger of irresponsible wealth, for such an important social subject is not above the office of a Herr Doctor, in Meredith's opinion. There are other examples in his novels of scholarship acting as an authority on social questions.

The Egoist contains, according to the critics, Meredith's most masterly portrait of boyhood in the character of Crossjay Patterne. His teacher, Vernon Whitford, the hero of the book, having thus estimated Crossjay's qualities, planned how the boy might enter the navy: "'Crossjay has a bullet head, fit neither for the University nor the drawing-room,' said Vernon; 'equal to fighting and dying for you, and that's all.'" The boy does not seem to me entirely natural, but this much, at least, is as lifelike as it is likable:

> . . . . a rosy-cheeked, round-bodied rogue of a boy, who fell upon meats and puddings, and defeated them, with a captivating simplicity in his confession that he had never had enough to eat in his life. . . . . He was not only indolent, he was opposed to the acquisition of knowledge through the medium of books, and would say, "But I don't want to!" in a tone to make a logician thoughtful. Nature was very strong in him. He had, on each return of the hour of instruction, to be plucked out of the earth, rank of the soil, like a root, for the exercise of his big round headpiece on those tyrannous puzzles. But

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the habits of birds, and the place for their eggs, and the management of rabbits, and the tickling of fish, and poaching joys with combative boys of the district, and how to wheedle a cook for a luncheon for a whole day in the rain, he soon knew of his great nature.

I have mentioned a second instance of Meredith's hero being a teacher. Vernon Whitford is a more attractive hero than Matthew Weyburn, but the latter, who appears in a later book is, pedagogically sounder. Whitford's "sharply tutorial" manner suggests earlier ideals of discipline. But his relations with Crossjay, and the heroine's affection for the child, attract the reader's attention to the subject so interesting to Meredith, the care of the young.

In *Evan Harrington* the tutor John Raikes, a minor character, is a second instance of a disagreeable personality being assigned to this occupation. But while Adrian Harley was base, John Raikes is harmless and unimportant to the story. Here the tutor is used by Meredith to illustrate imposture, for Raikes "represented to you one who was rehearsing a part he wished to act before the world, and was not aware he took the world into his confidence." His position as tutor to an invalid young lady was secured for him by his old school friend, Evan Harrington, who knew Raikes's poverty; but when Raikes had presented himself at their old school and asked for a position as usher, the principal had said, "You an usher, a rearer of youth, Mr. Raikes? Oh, no! Oh, no!" That the principal was astute is soon evident to the reader. Raikes is almost a caricature, a Dickens-like creation.

Another minor character in this book, Aunt Bel, "a sprightly maid fifty years old, without a wrinkle to show for it—the Aunt Bel of fifty houses where there were young women and little boys," guesses correctly that one in the circle conjecturing the cause of her remaining unmarried, chose Latin as the reason. "A young man would not marry a woman with Latin, but would not guess it the impediment." This leads to a conversation illustrating Meredith's ideas on female education:

A divergence to other themes ensued, and then Miss Jenny Graine said "Isn't Juley learning Latin? I should like to join her while I'm here."

"And so should I," responded Rose. "My friend Evan is teaching her during the intervals of his arduous diplomatic labours. Will you take us into your class, Evan?"

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"Don't be silly, girls," interposed Aunt Bel. "Do you want to graduate for my state with your eyes open?"

Regarding this young Evan the reader is put into a frame of mind to find the poor young fellow infinitely touching in his despair, though his trouble is only about the choice of a profession—he knows that it is right for him to continue his father's business of tailoring, but the work seems odious to the young man:

Evan had just been accusing the heavens of conspiracy to disgrace him. Those patient heavens had listened, as is their wont. They had viewed and had not been disordered by his mental frenzies. It is certainly hard that they do not mean to come down to us, and condescend to tell us what they mean, and be dumbfoundered by the perspicuity of our arguments—the argument, for instance, that they have not fashioned us for the science of the shears, and do yet impel us to wield them.

He is not just at this moment a very heroic young man, but he touches the heart, this adolescent. A natural and engaging trait, soon no longer possible and perhaps happily so, is Evan's ignorance of the unfortunate plight of the young woman that he has saved from suicide; the waggoner intimates and at last is forced to indicate plainly that

the complaint the young woman laboured under was one common to the daughters of Eve. . . . . "Why couldn't you tall that?" said the waggoner, as Evan, tingling at the ears, remained silent. "*I* know nothing of such things," he answered hastily, like one hurt. I have to repeat the statement, that he was a youth, and a modest one. He felt unaccountably, unreasonably, but horribly, ashamed. The thought of his actual position swamped the sickening disgust at tailordom. Worse, then, might happen to us in this extraordinary world!

The delicacy of this treatment of Evan's innocence is a mark of respect to him.

Beauchamp's Career, written directly after an election in which Meredith took great interest on account of the candidacy of an intimate friend, resembles *The Ordeal of Richard Feveril* in being the study of a youth's development. And this youth is one "born with so extreme and passionate a love for his country, that he thought all things else of mean importance in comparison." When he is less than fourteen he had this reason for preferring to be a parson rather than a naval officer: "In one particular, parsons are envi-

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able—they have time to read history and decide which party was right in our civil war." Here is a suggestion to us; history is a favorite study with boys; let us direct them, if they show no natural inclination, toward deciding "which party was right," for a true opinion will be useful in all professions. Dr. Shrapnel, who talks like Carlyle, is Beauchamp's teacher and friend; like the Herr Doctor in *Harry Richmond*, he makes notable remarks, suited to Meredith's rating of this office. Dr. Shrapnel is a Radical and free-thinker. His ideas are Meredith's personal opinions. Dr. Shrapnel's relations with Nevil Beauchamp are represented as being more intimate than Beauchamp's relations with his own kin. Crossjay Patterne in *The Egoist* admired Vernon Whitford, his teacher, more than any other person; pedagogists have noted the tendency of adolescents to admire chosen heroes outside their family; as Meredith presents the case, this relationship is not so much natural as desirable. Dr. Shrapnel's grief during the crisis of Beauchamp's illness is profoundly personal, almost parental. The mentor and master feels toward his disciple, molded by him, as toward a child.

Meredith believed in coeducation. His ideas on the education of girls appear in several different novels but are not worked out in such detail as are his ideas on the education of boys. His ideas about the education of girls are related in general to his belief that women must be recognized as possessing brains.

Harmony of the sexes, cosmopolitanism, individualism, sanity, these are in Meredith's opinion some aims of education. I believe that anyone will be rewarded if for the first time, or with fresh courage, he undertakes to make a study of Meredith's novels, for the purpose of becoming familiar with important social ideas.

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THE SOCIETY OF COLLEGE TEACHERS OF EDUCATION

PROGRAM

The College Teachers of Education will meet with the Department of Superintendence of the National Education Association in Philadelphia on Monday and Tuesday, February 24 and 25. There will be three sessions.

FIRST SESSION, 10 A.M., MONDAY, FEBRUARY 24

1. "Some Psychological Characteristics of the Intermediate Grades of the Elementary School." CHARLES H. JUDD, University of Chicago.
2. "A Study of Association in Children in Relation to the Learning Ability." ELMER E. JONES, University of Indiana.
3. "Abilities of High-School Students": (*a*) "The Ability of Students Who Elect the Different Courses Offered"; (*b*) "The Relation of Failures in Mathematics to Elimination"; (*c*) "The Correlation of High-School Marks." G. D. STRAYER, Columbia University.

SECOND SESSION, 3 P.M., MONDAY, FEBRUARY 24

1. "Incidental Instruction (especially in German, Geometry, and the 'three R's')." J. L. MERIAM, University of Missouri.
2. "An Experiment with the Courtis Arithmetic Tests." E. E. RALL, University of Tennessee.
3. "A New Method in the History of Education." H. H. HORNE, New York University.

THIRD SESSION, 2:30 P.M., TUESDAY, FEBRUARY 25

Complete arrangments for this session have not been made, but there will be no formal papers presented. The business matters of the society will come up at this session.

Members will be notified of the place of the meetings later. The *Yearbook* will be out about February 5.

CONSTITUTION

PREAMBLE

In order to promote the teaching of education in the colleges and universities of the country, we, the undersigned, do hereby adopt the following

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CONSTITUTION

ARTICLE I. NAME

This association shall be styled The Society of College Teachers of Education.

ARTICLE II. PURPOSE

It shall be the general purpose of this society to improve the work of the departments of education in the colleges and universities of the country. To this end it shall (1) Ascertain in as great detail as possible what is actually being done from time to time in the various colleges and universities, and this information shall be disseminated among its members in the most effective manner. (2) It shall encourage wise experimentation in developing new courses in education in colleges and universities. (3) It shall, through committees or otherwise, attempt to determine the relative value for college and university students, both graduate and undergraduate, of different courses in education. (4) It shall study the relationship of the department of education to other departments in colleges and universities, to the end that this relationship may be most harmonious and helpful. (5) It shall discuss current educational theory so far as this is germane to the work of the members of the association.

ARTICLE III. MEMBERSHIP

Section 1. All teachers of educational subjects in bona fide colleges and universities shall be eligible to membership in this society.

Section 2. All those persons who were in attendance upon the first meeting in Chicago, and who shall sign this constitution and pay the membership fee, shall be regarded as charter members. All other members shall be elected by the executive committee.

Section 3. Members shall be elected by the executive committee, and shall pay a membership fee of two dollars. Other funds necessary for the maintenance of the society shall be raised by assessments levied on the members of the society. (Amendment of February 25, 1903.)

ARTICLE IV. OFFICERS

Section 1. The affairs of the society shall be placed in the hands of an executive committee of five members, the officers of which shall be a chairman and a secretary. The chairman shall preside at the meetings of the society, and the secretary shall assume all the duties usually devolving upon such an officer. In addition, he shall take charge of the funds of the association and expend them under the direction of the executive committee. The chairman and the secretary shall be elected annually by the members of the society.

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Section 2. One member of the executive committee shall be elected each year by the members of the society, and shall hold office for five years. The present executive committee shall determine by lot the terms of office of its members, arranging it so that one member shall serve for five years, one for four years, one for three years, one for two years, and one for one year.

ARTICLE V. MEETINGS

There shall be one meeting of the society each year, to be held at the same time and place as the meeting of the Department of Superintendence of the National Education Association until otherwise determined by vote of the society. The executive committee shall have charge of all details in arranging for each meeting.

ARTICLE VI. AMENDMENTS

Amendments may be made to this constitution by a two-thirds vote of the members of the society at a meeting subsequent to that at which the amendment has been proposed in writing.

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DISCUSSION

ENGLISH LITERATURE AND THE COLLEGE FRESHMAN—A REPLY

The article by Miss H. S. Hughes entitled "English Literature and the College Freshman," which appeared in the November *School Review*, should cause teachers of English both in the preparatory school and in the college to pause and reflect. The situation as depicted here is indeed deplorable. If the secondary school is turning out pupils after four years' training so utterly lacking in the knowledge of the ABC's of English literary history, so helpless in essentials of general culture, as is here represented, then, as the author of the article suggests, there must be something fundamentally wrong in the high-school method and curriculum; therefore, the college under present conditions can hope to accomplish little for the Freshman toward training for advanced work in English.

The author concludes, on the basis of her very interesting tables and charts, first, that the high school is failing to accomplish certain things expected of it; secondly, that certain things legitimately left untouched by the high school rarely come to the student from outside; thirdly, that too little emphasis is laid on the matter of historical relations by such a study of the background of a piece of literature as should add to the vividness of the student's interest in and appreciation of the book as a whole; finally, that there is a widespread tendency on the part of the high school to neglect the study of lyric poetry. Let us examine these charges in detail.

First, what are these "certain things" which the high school is expected to accomplish? Evidently they involve not only a knowledge of the text itself, but also some of the biographical and historical data connected with it. Theoretically the high school ought to accomplish this much, practically it cannot. The primary aim of the high school (I speak of conditions in the high school particularly, because it is from this class of secondary school that the large majority of college Freshmen come) is to give the student a knowledge and appreciation of a prescribed set of books. Means to this end concern themselves naturally with biographical and historical facts. No teacher, for example, would attempt to present the "De Coverley Papers" to a class without some

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account of Addison and Steele as men, and without some effort to revive the social, political, and literary life of the first half of the eighteenth century. But even so, how much of such background as can be given in the short time devoted to this text, is going to stick? If the pupil, after a year or two, remembers anything about the book it is likely to be content, story. An exercise calling for outside knowledge of books, that is, knowledge dealing with dates and authors, is perhaps not as fair a test of what the high school is expected to accomplish for the student in English literature as would be an exercise involving a knowledge of content.

Again, that certain things legitimately left untouched by the high school rarely come to the student from any other source is true but not surprising. Of the high-school students that take the college preparatory course, by no means all have a taste for literature. They represent a wide range of interests: science, arts, languages, mathematics, not English alone. Even when the school succeeds in stimulating in a child of other tastes a liking for literature, the new interest is often checked by conditions outside the school. Such a child may come from a non-reading, even illiterate family, wholly unsympathetic to the influence of books. "You know we have no books at home," was the pathetic answer once made me by a high-school girl to whom I had recommended some outside reading. The high school gives to many children all they ever get of literature. This class of children and that represented by the child of scientific tastes inevitably keep the high school from doing what it might in its English work if it dealt only with children of literary taste, coming from families with background. Thus when students of varied origins and varied interests are brought together in a required course in English and requested unexpectedly to answer a set of questions on books, dates, and authors, a result such as Miss Hughes describes, while depressing, is not unaccountable.

Thirdly, Miss Hughes declares that there is a widespread tendency on the part of the high school to neglect the study of lyric poetry. For this condition she seeks a partial explanation in the fact that lyric poetry requires more delicate handling by the teacher than does narrative poetry, and that narrative poetry is more attractive to boys and to girls of non-literary taste. I believe this explanation to be correct. But Miss Hughes goes on to say: "If properly taught, the lyric, with its personal note and idealistic beauty, should make an appeal to the adolescent mind; and such poetry should have a desirable influence in refining and in defining the ideas and sentiments of that period

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of storm and stress." Here I must disagree. I believe that with a few exceptions lyric poetry, as represented by Keats, Shelley, Wordsworth, Byron, Browning, Arnold, has little place in the high school. However well taught, it is only to the rare soul in the period of adolescence that such poetry appeals. The average high-school pupil is but a child in mental, moral, and emotional development. And even where there is such maturity, it is far better to give good, sane, objective poetry than the lyric with its personal note, which may turn a girl's thoughts in upon herself and thus feed an unwholesome, introspective mood. If, therefore, the high school is neglecting lyric poetry of a personal note I think it is acting wisely.

And yet, after all that can be said in defense of the high school in this matter of preparatory English, we must admit that Miss Hughes's statistics are discouraging. But such an admission leads us to ask the question whether the author's results are fairly representative of the secondary schools of the country. Can it be stated with confidence on the basis of a single test that the secondary schools of the country fail to measure up to what is expected of them in equipping their students for college English?

Eager to discover whether the same test, applied to another set of Freshmen, would meet with any appreciable difference in result, I applied Miss Hughes's test to fifty of my college Freshmen, who represent all sections of the country and who came to me with only such knowledge of literature as they had received at school and at home. My results, compared with those of Miss Hughes, are tabulated below. Groups marked *A* are hers; those marked *B* are mine.

Although in Groups I*a* and II a few of my percentages are lower and a few are the same, in the majority of cases they are considerably higher, and in group I*b* they are higher in every case. Though there was not a single perfect paper in the set, and though some of the answers were amusingly wide of the mark, such as the ascribing of *Beowulf*, *The Faery Queen*, *The Shepherd's Calendar*, and *The Ancient Mariner* to Chaucer, and *King Lear* to Tennyson, there were more answers that were astonishing in their range and intelligence. For example: Ben Jonson, *The Alchemist*, *The Noble Nature;* Pope, *The Dunciad*, *The Essay on Criticism;* Johnson, *Rasselas*, *The Lives of the Poets*, *The Rambler*, *Irene;* Arnold, *Culture and Anarchy*, *Sweetness and Light;* Fielding, *Amelia;* Dryden, *Absalom and Achitophel*, *Astrea Redux*. Considerable variety was evident in the naming of a work of the author: there were 9 plays of Shakspere's given, 6 novels of George Eliot's; 12, of Dickens'; 4, of

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Thackeray's. There were given 9 poems by Wordsworth, including *The Excursion*, *Westminster Bridge*, and *Tintern Abbey;* 6, by Keats; 6, by Browning; and 9, by Tennyson, including *The Palace of Art* and *Maud*. This range of knowledge, while surprising and gratifying, is not

	A	B	A	B
Ia. Single Work of Author			Ib Author's	Half-Century
Shakspere	100%*	100%	14%	62%
Milton	100	100	6	48
G. Eliot	92	98	16	20
Dickens	90	100	12	42
Chaucer	86	78	14	32
Thackeray	82	76	6	20
Tennyson	80	98	18	36
Scott	80	98	10	18
Spenser	68	86	0	16
Wordsworth	58	60	14	40
Pope	56	62	0	12
Coleridge	44	92	10	36
Byron	40	50	4	32
J. Austen	36	50	6	12
Arnold	14	44	4	36
S. Johnson	14	64	4	14
Browning	10	26	14	34
Keats	10	20	4	28
B. Jonson	4	40	8	14
Fielding	4	2	2	4
Rossetti	4	14	0	12
Dryden	4	20	0	8
II. Author of the work				
Canterbury Tales			94	94
Faery Queen			90	90
King Lear			88	96
In Memoriam			84	68
Mill on the Floss			80	96
Idylls of the King			78	100
Lycidas			66	100
Rape of the Lock			64	88
Ode on Immortality			60	60
Childe Harold			52	54
Prisoner of Chillon			44	36
Essay on Man			42	52
Pendennis			40	30
Sohrab and Rustum			40	48
Rabbi Ben Ezra			14	12
Christabel			10	38
Blessed Damozel			10	22
Ode to the West Wind			10	26
My Last Duchess			10	14
Alexander's Feast			6	52
Eve of St. Agnes			6	24
Grecian Urn			6	32
Adonais			2	16
Tintern Abbey			0	12

*I have used percentages instead of charts, for they seem clearer for purposes of comparison.

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so phenomenal as it at first appears, for it may indicate not so much an acquaintance with these works themselves, as assiduous perusal of Pancoast, Halleck, Moody and Lovett, or other familiar guides to English literary history, assisted by a retentive memory.

That the same test applied to two different groups of Freshmen should give this variation in results may be accounted for largely on the basis of college entrance standards. A college draws the majority of its students from its own locality; hence, whatever the entrance standards of a given college may be, the curriculum of the preparatory schools in that vicinity will inevitably be affected by those standards. In the first instance, this test was applied to a Freshman class in a woman's college in the Middle West; in the second instance, to a woman's college in the East. Whether the results are in each case fairly representative of conditions in these respective sections of the country I should not feel justified in stating on the basis of a single trial. But without further investigation, if one recalls the number of women's colleges of first rank distributed along the coast from Maryland to Massachusetts, and reflects upon their certain influence on the preparatory schools, both public and private, from which they draw the greater number of their students; and moreover when one remembers that many of these private schools, especially in the South, still count literature among the "accomplishments" and devote to it special attention, one must admit that the opportunity for variation in the results of such a test as this is indisputable. Thus the two applications of this test as here recorded may not be an unfair indication of the proportionate difference between the standards of the preparatory schools in the Middle West and in the East. Consequently, the second application of the test would suggest that what may be true of conditions in preparatory schools in one section of the country may not be true of all sections, and that such a test would need to be made in all representative localities before it could be said to show with any degree of accuracy the standard of college Freshmen generally in the essentials of English literature.

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EDUCATIONAL NEWS AND EDITORIAL COMMENT

THE CHICAGO UNIVERSITY DINNER AT THE MEETING OF THE DEPARTMENT OF SUPERINTENDENCE

In connection with the meeting of the Department of Superintendence in Philadelphia during the last week in February there will be a dinner of the former students and graduates of the University of Chicago. Placards will be posted announcing the exact time and place of this dinner. The dinner will occur on Wednesday evening. It will be the third annual event of this type. The dinner originated in imitation of the example of Teachers College, which has for a number of years had a reunion of its former students and graduates at this time. The dinner of Teachers College is held on Tuesdays so that no conflict is possible between the two gatherings. All who read this notice are requested to spread the information so that the attendance at these dinners may be as large as possible.

CONTROL OF THE GERMAN INDUSTRIAL SCHOOLS

The current number of the *Elementary School Teacher* contains an article by F. W. Roman on the control of German industrial schools. So much hinges on the correct understanding and interpretation of the German example in this matter that it is important that the largest possible amount of information be had with regard to the success or unsuccess of the system of education which is in operation in Germany. Professor Roman has shown clearly that the Prussian system of the separate industrial schools is by no means the most successful or even the typical form of organization in Germany. It is not appropriate to reprint in this *Review* any large part of the article. One passage, however, may very properly be repeated. This significant paragraph is prefaced by the statement that in several of the German states, especially Baden and Würtemberg, the school system is not divided as it is in Prussia, but the two kinds of schools, namely, the common school and the industrial school, are under the same control. "So far as whole states come into consideration, Würtemberg and Baden lead. They were the first to develop such schools, and are still leading in efficiency of organization, number of boys and girls in attendance per

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capita population, and also in amount of money spent. It seemed to me, the Germans were quite unanimous in this conclusion. This again is due in no small degree to a united action for which the school organization provides." Mr. Roman's whole argument is so significant that it is to be hoped that all who are interested in the problems of the organization of industrial education will refer to the original paper and discover from his statement how little comfort there is in German experience for those who favor a divided school system.

THE CONSOLIDATION OF STATE INSTITUTIONS FOR HIGHER EDUCATION

Attention has already been called in the *Review* to the moves which have been made in Iowa and Vermont in the direction of consolidation of the higher institutions of learning. A similar project is under discussion in the state of Montana.

On December 23, there met in Helena between forty and fifty prominent citizens of Montana who organized an "Association for the Creation of a Greater University of Montana." They went before the state board of education with arguments for the consolidation of the State University, the Agricultural College, Normal School, and School of Mines. After hearing the arguments in favor of consolidation of these institutions, the state board unanimously adopted a resolution recommending to the legislature that the consolidation be carried out.

This association has in view a somewhat wider project than the mere consolidation of the state institutions mentioned. It wishes to bring about within the state the development of a better school system which shall be more efficient and economical. From the statement of its purposes the following extracts may be quoted:

> It is the purpose of this Association to consolidate the four higher educational institutions in order to prevent inefficiency and waste. . . . . To work for the creation of an expanded system of polytechnic high schools, which are at the present time so much needed. . . . . To impress upon the attention of philanthropic persons the desirability of aiding in the development of the University of Montana through the provision of buildings and endowments. To arouse public sentiment in favor of education, and to arouse the enthusiasm of the people to the unsurpassed educational possibilities of the great commonwealth of Montana.

There can be no doubt at all that the movement which has been set on foot in Montana is in keeping with the best interests of the state and the higher education of that section of the country. As has been

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pointed out in the discussions of similar undertakings in other states, the whole problem of readjustment raised by this and similar movements is a very urgent one, and its solution calls for educational statesmanship of the highest order.

HIGH-SCHOOL FRATERNITIES

The problem of eliminating high-school fraternities has been attacked in various ways in different parts of the country. The state of Indiana passed a state law prohibiting fraternities in high schools. It is the testimony of many who have tried to administer this state law that it is quite impossible to bring within the definition of the statute many of the organizations which are in reality fraternities.

In the city of Chicago there has been for some time a ruling of the Board of Education against these organizations. It is well known that they exist in the high schools, but the administrative machinery for their elimination is very difficult to set up. On one or two occasions principals have attempted to exclude students because of membership in these organizations, and they have found it very difficult to carry out that program. The Board of Education adopted a very drastic pledge during the last year to which the names of students must be attached, but these pledges were not administered in some of the schools, and many of the students and parents regard the pledges as negligible in actual practice. During the last few weeks a most vigorous effort has been made by the Board to eliminate these organizations.

The Board of Education of the city of New York recently passed a rule against high-school fraternities. The experience of that city will undoubtedly be the experience of the Indiana state system and of the city of Chicago.

In the meantime, a hopeful movement has been started by one of the college fraternities. Phi Delta Theta Fraternity, which has approximately 18,000 members, at its recent national convention adopted, on the third of January, 1913, the following resolution: "*Be it resolved*, That no person shall be eligible to initiation to membership in this fraternity who shall have been a member of any general or class secret society in any public preparatory or high school. Provided that any person who, prior to the adoption hereof has joined such a society, shall be eligible to membership upon his resignation for all time from such society, proper evidence of good faith being presented, and upon permission of the General Council and of the Province President. Such

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permission shall not be granted if such a society existed contrary to the law or to the regulations of the institution wherein it existed."

This resolution was carried subject to the approval of the National Interfraternity Council.

This action of the Phi Delta Theta Fraternity is, on the whole, the most promising of the various moves which have been made to deal with this matter. Most of the high-school societies have originated through the activity of some enthusiastic high-school alumnus who has later become affiliated in his college course with a college fraternity. It is the very general belief of high-school officers that the organization of these fraternities in the lower schools is a mistake, and that the enthusiasts who have brought these fraternities into being have not seen the difference between high-school conditions and college conditions. The fact that a large college fraternity should recognize the distinction in such a definite enactment is likely to impress high-school students more than the relatively futile appeals of high-school officials.

CONGRESS ON SCHOOL HYGIENE

The United States will be the meeting-place of the Fourth International Congress on School Hygiene. The preceding congresses have all been held abroad, the first at Nuremberg, 1904, the second at London, 1907, and the third at Paris, 1910. The 1913 congress will be held at Buffalo, N.Y., August 25–30.

It is the object of the congress to bring together men and women interested in the health of school children and to assemble a scientific exhibit representative of the most notable achievements in school hygiene. It is believed that the present widespread public interest in health education will make the exhibit a particularly attractive feature of the congress.

Twenty-five nations have membership on the permanent international committee of the congress and it is expected that all will have delegates at Buffalo. The Secretary of State has officially invited foreign governments to participate. Invitations have also been issued to the various state and municipal authorities, and to educational, scientific, medical, and hygienic institutions and organizations.

EFFECTS OF THE NEW HARVARD ENTRANCE REQUIREMENTS

When the new entrance requirements were adopted at Harvard University two years ago, it was frankly stated that the intention of

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the authorities in adopting these new regulations was to bring to the university students who had been prepared in the high schools, particularly in high schools remote from Boston. The grave danger in the earlier entrance system was that of limiting admissions to a group of private schools in New England. The effect of the new entrance requirements has been that which was anticipated when the legislation was adopted. The geographical distribution of students entering by the two methods is indicated by the report that 86.1 per cent of students who entered under the old plan came from New England while only 51.3 per cent of those who entered under the new plan last year came from New England. Of the 154 admitted last year under the new plan 124 came from public schools.

It is interesting to note in connection with these statistics that the old plan is still regarded as the simpler plan by a large number of students. These are especially the students who come from private preparatory schools where the old plan has long been familiar. The certainty with which the old scheme can be administered and the certainty with which students can be coached to pass the well-known type of examinations evidently play some part in determining the choice of the majority of students.

That Harvard will be able through this changed method of admissions to attract very many students from the public high schools is rendered doubtful by the fact that in New England and in all of the rest of the United States plans of admission of students through certificates are becoming more and more firmly established. The growth of well-equipped universities in the Middle West makes it less and less necessary for students to go to the East for their education. The lack of uniformity of plans of admission strengthens the growing tendency for the students to remain at the institutions nearer their homes, especially if they can enter these institutions without the hazards of examinations.

LATIN AND GERMAN UTILIZED IN SCHOOL PUBLICATIONS

A publication from Crawfordsville, Ind., presents on one side of the sheet the doings of the high school in Ciceronian Latin; on the other side of the sheet are brief German notes of a similar type. This publication is issued by the students of the high school. To be sure, the critic might find some minor defects in the use which has been made of these two languages. The title on the German side of this publication is "Deutsches Echo der Hochschule." Technically speaking, the

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Germans use the last word only when referring to their universities and higher technical schools, but the loss that would come from emphasizing this point is greater than the gain that would come from a strict adherence to German terminology, if indeed that were at all possible. A few extracts from the Latin side of the publication may show the versatility of the editors.

Scientia Domestica.—Scientia Domestica per hunc annum fuit acceptissima. Hoc studium vero fuit magno usui mihi. In sex primis dictatis rudimenta fructus conservandi et coaguli faciendi cognovimus. . . .

Pueri Societatis Athletica Multitidinem Vehementer Convocaverunt.—Omnes pueri societatis athleticae ad deligendos duces anno postero convenerunt. "Preston Rudy" multo et divino impetu imperator est delectus, et "Fredericus Hunt" etiam proximus imperio est delectus. Magistratus librari et aerari praefecti constituti sunt et "Delbertus Clements" ad hos habendos est delectus. . . .

Conflagratio calamitosissima multis mensibus in "Indianapolis" fuit incendium aedifici magni "C. O. Langen" centum septuaginta quinque milibus thaleris amissis.—H. W.

CO-OPERATION BETWEEN SCHOOL AND LIBRARY

A pamphlet has recently been published by the library at Grand Rapids, Mich., entitled *The Library and the School.* This pamphlet opens with the statement that the relation between the Grand Rapids public library and the public schools of the city is unusually close. A description is then given of the evolution of the organization which brought about this intimate relation between the two public institutions. Branch school libraries and traveling libraries are described. These modes of bringing books to the children are, however, sufficiently well known, so they need perhaps no special discussion here. One paragraph in the pamphlet attracts attention as indicating a very useful type of instruction which is not common in American schools and libraries. "Systematic instruction of school children in the use of the library is one of the regular features of the work with schools." Most of this instruction is given in the children's department of the central library building but some is carried on in the schools, particularly in the high school. Teachers bring a whole class to the library. The class is given some idea of the methods of classification, use of catalogues, etc. More than five thousand children received such instruction last year.

It is certainly important that relations of this type should be

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developed. The question as to the proper source of initiative of such combinations will have to be settled in various communities in terms of the special conditions. If superintendents would secure the report from Grand Rapids they might be able to bring about the relations through the action of the Board of Education. Conversely, if the attention of librarians could be more generally drawn to the advantage of such relations they would undoubtedly seek to secure the opportunity which the Grand Rapids library has cultivated so fully.

THE PLAYGROUNDS AND RECREATION CENTERS

The secretary of the Playground and Recreation Association of America recently issued from the address of the association, No. 1 Madison Avenue, New York City, a report of the year's developments in the playground movement. A general summary of the year's progress is given on the opening pages of this report.

Forty cities report that supervised playgrounds were opened for the first time during the past year. Forty-eight cities report that they are using their schoolhouses as recreation centers. The University of California had more than 1,000 students in its summer playground course last year. During the year, the number of cities having associations increased from twenty-four to thirty-seven. Reports have been received from 257 of the cities maintaining playgrounds. In 19 cities there is an investment for recreation purposes of $4,445,500. During the year $2,750,000 were expended for the administration of playgrounds. Twenty-five cities in twelve different states received donated playgrounds during the year. The pamphlet gives further information about the development of this type of work.

There can be no doubt that the organization of these playgrounds is a matter of vital concern to the school officers. In the first place, it is desirable that the school officers should, so far as possible, initiate the movement so as to gain for the schools those advantages that come from proper location and proper management of the playgrounds. Co-operation between the playground managers and school officers is always possible, but where the two organizations can be organically related this co-operation is more certain than it can be where the two organizations are separate.

The following concrete example shows how the matter may be wisely managed. The Board of Education of the city of Boise, Idaho, recognizing the importance of the playground movement, first established

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a small playground in the center of the city. It then extended the scope of its activities far enough to purchase on the edge of the city a plot of forty acres, which it is developing into a play-park for the schools and the city in general. These forty acres were purchased for $16,000. They are easily accessible on the trolley lines, and they lie near the river, so that the possibilities of developing all sorts of play activities are almost unlimited. A large football field has been laid out. In order that this may be brought into perfect condition, it is to be cultivated for a number of years by the classes of agriculture in the schools. Another plot has been laid out for baseball and other purposes requiring a large, level field. Between the two fields is a grove of trees which will be taken care of by the class in forestry. A lagoon which will be connected with the river will be opened up between the two fields, and will furnish skating and other forms of amusement.

The educational possibilities which are supplied by this undertaking have been intimated in the foregoing paragraph. The co-operation between the communities and schools is attested by the fact that the citizens are willing to support this plan originated by the Board of Education, and in addition the park promises to be a constant means of cultivating a wholesome relationship between the citizens and the schools. Certainly there is no agency in any municipality which ought to be more active in promoting the organization of playgrounds than the school board.

A VOCATIONAL GUIDANCE BUREAU

The Chicago Association of Commerce, in seeking for some field not now occupied by other associations, has discovered the importance in the city of Chicago of developing a vocational bureau. This is not an employment bureau but is an agency for investigation and advice and deals so far as possible with children who are actually in school in the hope of improving their training for a later vocation. The new bureau has the co-operation of the Board of Education and of the Chicago School of Civics and Philanthropy, which up to this time has been the most active agency in the city of Chicago in dealing with this problem. A secretary has been employed for this new bureau whose business it will be to gather information through the school records and through the advice of the School of Civics and Philanthropy in any given case. Each child's school record, environment, and home condition will be investigated and the first business of the secretary will be if possible to keep the child in contact with school opportunities

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as long as possible. The secretary and the members of the committee who are back of this movement will also develop the avenues of contact with employers so that there may be the freest exchange of information between the children who are seeking positions and the employers who are seeking competent employees. As indicated in this statement, the exact direction in which the work will develop remains to be determined by the experience of the secretary and the committee. Undoubtedly it will develop ultimately into an organic part of the school system, thus supplying a need which is universally felt but for which no provision is at present made in the public-school system.

AN ENGLISH SCHOOL FOR PRINTERS

The student of English schools finds in the educational development which is going on in the large manufacturing cities of England a most stimulating example of the success of a compact community in building up a complete school system. These municipalities have broken away from the traditions of the old English education and have established the most intimate relations between higher institutions, lower schools, and all branches of technical and general education. The municipal universities, so called, are among the most comprehensive institutions of higher learning. They include medical schools and technical courses of various sorts, as well as the traditional university courses. American students whose attention has been drawn to the German example of industrial education will find in the technical courses in the English municipal systems equally good examples for American consideration and possible imitation. The following account of a technical course in Leeds, England, indicates in a concrete way the character of some of these courses: At the Technical School in Leeds a department of printing has been equipped. Evening courses were opened last year and more than one hundred and fifty apprentices and journeymen attended these classes. This work is being extended and now includes courses in typography, process work, lithography, linotype operating, drawing and design, mechanics for printers, and printing-machine mechanism. This group of courses makes it possible in connection with the work which is done in photography in the same school to develop not only the regular press work but also related forms of artistic printing and reproduction of drawings.

Printing has been recognized by all those who have introduced it into school work as very available material for elementary-school and

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high-school instruction. It can be utilized as a part of the regular course and furnishes, as indicated in this example, an opportunity to bring in a type of technical trade work which may be closely related to general school work.

TEXTBOOKS

The importance of providing good schoolbooks at the lowest possible rate keeps the general subject of textbooks constantly before the public. A few of the month's items on this topic may be quoted to show the problems which arise in this matter and the variety of methods of dealing with these problems in different parts of the country. From Phoenix, N.Y., comes the statement that the Board of Education has decided to purchase all textbooks used in the schools and sell them to the pupils at exact cost. From Pocahontas, Ark., comes the statement that the Randolph County Textbook Board has been organized for the purpose of selecting a series of textbooks for the common schools in that county for the next six years. In Portland, Ore., the Grade Teachers' Association is reported as urging that one of its members be placed on the textbook commission which will be appointed next year. The commission is appointed every six years and the grade teachers are of the opinion that, since they constitute the largest teaching force of every community, they should have some word in choosing the books from which they will teach the children of the state. From Dayton, Ohio, comes the statement that the Western Ohio Superintendents' Round Table "opposed vehemently" the adoption of uniform textbooks. A resolution was adopted at its recent meeting placing the Round Table on record as absolutely opposed to such uniformity. In California the constitutional amendment was adopted providing for free textbooks for the children in the elementary schools, but the machinery for providing and distributing these books cannot be perfected before next fall at the earliest. Legislative enactments are necessary in order to provide the books required by the amendment. From Joplin, Mo., comes the report that the Board of Education has passed resolutions, the first of which is as follows: "WHEREAS, The present textbook law is generally unsatisfactory in this state, and each textbook company doing business in the state tends by its persistent activities to disturb the official administration of the schools by clamoring for textbook changes; therefore, *be it resolved*, That this board goes on record as favoring a change in our textbook law whereby we may have uniform

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textbooks in the state, such textbooks to be selected by a non-partisan state commission." In Kansas, a controversy of long standing is being continued in the city of Topeka, where local agitators are clamoring as vigorously as they can that the city system is violating the laws of the state by using Dunn's *Community and Citizen* in place of the regular adopted textbook of the state. At its meeting in Washington, D.C., the Junior Order of United American Mechanics decided that a nation-wide campaign should be waged in favor of free textbooks.

Other examples of local interest in the questions of uniformity and free supply of textbooks might be cited. The issue is one which evidently arouses strong partisan views, both with regard to the desirability of uniformity, and with regard to the duty of the public to supply these books free of cost to individual children. Teachers find the whole question so much involved in local political issues that it is difficult to get any abstract consideration of the educational merits of the one or the other method of procedure.

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BOOK REVIEWS

Mental Fatigue. By MAX OFFNER. Translated from the German by GUY MONTROSE WHIPPLE. Baltimore: Warrick & York, 1911.

Professor Whipple has performed a genuine service in translating Dr. Offner's monograph into English. Bringing together a large amount of scattered material, this book presents the most important facts in regard to the nature, determination, and significance of mental fatigue, particularly in its relation to the work of the school. The translator, in order to increase the usefulness of the book to American readers, has added at the suggestion of the author to the extensive bibliography appended to the German edition a list of books and articles appearing in English, numbering in all forty-four titles and covering a wide range of topics. A second appendix gives a brief explanation of the German school system. Dr. Whipple has also inserted in several places footnotes "that are especially intended to assist those who desire it to gain information concerning the several methods of testing fatigue, or to undertake for themselves experimental investigations in the schoolroom or the laboratory." The author in preparing the book for translation has made a few changes by way of addition to the original text, but in all essentials the translation is identical with the German edition.

The monograph first considers the general nature of fatigue and the symptoms that indicate its presence; then there follows an extended discussion of the various methods that have been used to measure mental fatigue. The physiological tests are first taken up and the conclusion is reached that they are too unreliable to be used as exact measurements. In discussing the psychological tests the author gives a relatively large amount of space to the aesthesiometer-compass test of Griesbach and to the criticisms that have been urged against it. This is followed by a discussion of the so-called kinematometer test, the test of time estimates and the algesiometer test. Next are taken up those tests that concern the duration of mental processes and various test-problems, including computing, counting letters, dictation, memory tests, the completion test, cancellation, and copying, and a combination test that brings together some of the most important elements in the preceding tests. The author concludes that the psychological tests, despite many defects and difficulties, furnish serviceable average values and afford reliable information as to the effect and degree of fatigue. The discussion of the various tests for fatigue ends with a consideration of the method of continuous work as a means of determining fatigue.

The remainder of the monograph is chiefly given over to a presentation of the laws of fatigue. Under this topic are taken up the relation of fatigue

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to age, to the length of lesson periods and their number, to the days of the week, to pauses in the school work, to changes in the work, to social activities, to gymnastics, to various school studies, to afternoon instruction, to the school program, to the teacher, to the method of teaching, and to individual and class instruction. This section is particularly valuable to the teacher and contains many useful facts and suggestions.

In conclusion it should be said that the monograph does not aim to be a final statement of the questions raised, and the conclusions are tentative. "One of the objects of the translator is, accordingly, to stimulate others to contribute to this scientifically interesting and practically important aspect of experimental pedagogy." Dr. Whipple's translation should, therefore, prove of value not only to the practical school man, but to the investigator of educational problems as well.

S. S. COLVIN

BROWN UNIVERSITY

Elements of Geography. By ROLLIN D. SALISBURY, HARLAN H. BARROWS and WALTER S. TOWER. New York: Henry Holt & Co., 1912. Pp. 616.

The *Elements of Geography* is the second book to appear in response to the demand that geography should teach the relationship of life, especially human, to the natural environment. "The authors have sought to give the student (1) an understanding of the elements of geography, (2) an interest in the subject, and especially (3) training in clear thinking." The authors believe "that the chief object in geography teaching should be preparation for citizenship," an ideal which every true teacher of the science will endeavor to sustain. The first chapter deals with the "Nature of Geography" and serves as an introduction. "Earth Relations," "Relief Features," "Nature and Functions of the Atmosphere" are treated in three chapters, and the elements of climate and weather in the following four chapters. Three chapters are devoted to the climates of the tropical, intermediate, and polar zones, followed by four chapters on the "Oceans," "Materials of the Land and Their Uses," "Changes of the Earth's Surface Due to Internal Forces," and "Modification of Land Surfaces by External Agents." The significance of conservation is presented in a chapter on the "Uses and Problems of Inland Waters." The remainder of the text treats such modern phases of the subject as "Mountains and Plateaus and Their Relations to Life," "Plains and Their Relations to Life," "Coast-Lines and Harbors," "Distribution and Development of the Leading Industries of the United States," and "Distribution of Population; Development of Cities."

Many of the chapter titles seem to indicate an emphasis upon physical features and do not indicate the wealth of life-relations that are found in the text. These relationships are closely woven into the discussion of physical features so that the student cannot fail to appreciate the logical sequence of

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cause and effect. Broad, meaningless generalizations are absent, while the book is replete with definite human and other life-responses to specific physical conditions. The student is led to see the great importance of geographic science to human affairs. The book is in no sense a compilation of encyclopedic knowledge but is truly a contribution to the advancement of scientific geography. It is an epoch-making text marking the end of the old pure physiography as now taught in most schools, and the establishment of geography as a distinct and definite science. Its influence in the next decade will be far-reaching. The discussion of industries is far too brief to be of much intrinsic value but offers an excellent introduction to a more intensive study of economic geography, and will tempt the thoughtful student to further study of the many phases of the science.

Other features of the book are a wealth of well-selected illustrations which are closely associated with the text, an excellent collection of maps, and a series of questions at the end of each chapter. The answers to most of these questions are not given in the text but may be reasoned out after a careful study of it. These questions differ from the usual type in that they are truly problems in geography and are certain to arouse discussion.

High School Geography. Parts I and II: Physical and Economic. By CHARLES R. DRYER. New York: American Book Co., 1911. Pp. 340. $1.20.

Dr. Dryer's new book is designed to meet the demand for a new geography which shows the relationship of man to his natural environment. As a high-school text it is a pioneer in this field. Part I is called physical geography, but in the selection of material preference has been given to those earth features which have directly helped or hindered man in his progress. Such topics as the following give an idea of the subjects discussed: "Earth, Sun, and Moon"; "World Economy"; "The Land"; "Gradation by Running Water"; "The Economic Relations of Streams"; "Gradation by Ground, Water, and Wind"; "Soils"; "Coasts and Ports"; "The Atmosphere"; "Climate"; "Plant Regions"; "The Geography of Animals"; "The Human Species." While a few of these subjects do not occur in the older texts, most of them are so familiar that the change from the old geography to the new will be quite simple. Part II is called economic geography and "the outlines of household management practiced by the great human family in its terrestrial home are presented against the background of the natural earth already shown." "Natural Resources and Food Supply"; "Clothing and Constructive Materials"; "Heat, Light, and Power"; "Manufacture, Trade, and Transportation" are the subjects treated. This portion of the text presents to the high-school student a phase of geography which has been kept from him far too long and will awaken interest in what he frequently has considered as a "useless course." It seems, however, that Part II is too much of a compilation of descriptive

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material—of much instructive value—without sufficient attention to the development of successive geographic causes that lead to definite results. Relationships are frequently stated as bare facts but not proven, and the average high-school student demands proof. For this reason it seems to be better adapted "to learn" for recitation work than to develop reasoning. It is doubtful if any serious thinking on the part of the student will be induced by it.

Three hundred well-selected illustrations supplement the text. The book as a whole is an excellent contribution to the advancement of the new geography.

Physiography for High Schools. By A. L. AREY, F. L. BRYANT, W. W. CLENDENIN, and W. T. MORREY. New York: D. C. Heath & Co., 1911. Pp. 450.

In the *Physiography for High Schools* the authors have endeavored to select such material from the related sciences as seemed best adapted for high-school use. In making such selections they have kept in mind the 90 per cent of high-school students who complete their education in the secondary school. They hold that the student "should know of the earth as a whole, its relation to the other heavenly bodies, and the influence of its size, shape, and motions upon our daily life." This idea has led to the use of much astronomical, meteorological, geological, biological, and historical material. The text is divided into four parts, as follows: "The Earth as a Planet," "The Air," "The Sea," "The Land." An attempt is made throughout the book to show the relationship of climate and other physical environment upon man and his activities. It is to be regretted, however, that more emphasis has not been placed upon this phase of the subject. For this reason the book must be considered as a modified type of the old and not representative of the new geography. Nearly 250 illustrations consisting of pictures, maps, and diagrams supplement the text. At the end of each chapter are sets of questions designed to stimulate thought on the part of the student, as no direct answer to them is to be found in the text.

GEORGE J. MILLER

UNIVERSITY HIGH SCHOOL
CHICAGO

A Practical Course in Botany. By E. F. ANDREWS, with Editorial Revision by FRANCIS E. LLOYD. New York: American Book Co., 1912. Pp. ix+374. $1.25.

The aim of the makers of this manual has been to provide a course that should meet the requirements of a year's work for college entrance, and at the same time to relate the work to "the business of life" by introducing some economic plants, and by some attention to the elements of agriculture, forestry, pathology, and hygiene.

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The work starts with the morphology and physiology of the seed, continues with germination, the morphology and physiology of the root, stem, leaf, flower, and fruit, gives a chapter to the response of plants to surroundings, and ends with a chapter on cryptogams. The last chapter covers 65 pages, and the preceding part, commonly known as *general botany*, 295 pages. A feature of the book is the "Practical Questions" and "Field Work" which close each chapter.

The book is so written that recitations and a considerable part of the laboratory and fieldwork of the pupil can be taken directly from it, and the more abbreviated directions are detailed enough and suggestive enough for the trained teacher to supply various lines of work to the pupils in the direction of pure botany, or in the directions that are so much followed in the present day— agricultural botany, hygiene, and "civic biology."

That the book is excellent in its general make-up, in its method of presentation, in most of its illustrations, and in its suggestiveness for fieldwork and independent observations on the part of the pupil there can be no doubt; also its scope and selection of material and of experiments are generally good. But it is to be regretted that so many errors in physiology have found their way into the book. Photosynthesis is said to result mainly in the formation of starch. Diffusion and osmosis are not clearly set forth. The result of the action of the clinostat and the centrifuge are confused. Geotropism is variously defined as a *tendency*, a *force*, and a *function*. All that is said on contact stimulus and response is wrong. The pupil is told that the twining of a vine is due to retardation of growth on one side because of contact. Several errors are fundamental and therefore capable of much harm to the young teacher not firmly grounded in science, and especially to the pupil, who is supposed by these studies to be inducted into the truth.

FREDERICK C. NEWCOMBE

UNIVERSITY OF MICHIGAN

Soil Fertility and Permanent Agriculture. By CYRIL G. HOPKINS. Boston: Ginn & Co., 1910. Pp. xxiii+653. Illustrated. $2.75.

This book, which appeared from the press some months ago, is a profound treatise on the fundamentals of the permanent maintenance of soils. Past practices in careless farming, which have sometimes been called "soil mining," have depleted soils so seriously that the attention of all students of agriculture must be given more intently to the practices which will keep up the fertility of the soil indefinitely. The book comes at a time in the development of agricultural science when there is great need for such study. The author's standing in the agricultural world, and his long experience as a teacher, makes him a most suitable author of such a book. Agricultural college students, as well as high school students, pursuing soil studies, will find it a most valuable addition to the few volumes now available, as related to soil maintenance.

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Indeed the book is much to be preferred to the foreign books now offered for American students of this subject.

Dr. Hopkins has divided the subject into the following four parts: Part I, Science and Soil; Part II, Systems of Permanent Agriculture; Part III, Soil Investigations by Culture Experiments; Part IV, Various Fertility Factors.

The tables, illustrations, and maps, in the text are up to date and well suited to student work. The chemistry problems are made as simple as possible. The author's style is "studied and profound" and, indeed, the average farmer will find the book a disappointment because of the depth into which the author enters in the analytical discussions of the many themes taken up. There is a splendid appendix, including a number of topics which the student will have constant reference to.

K. C. DAVIS

COLLEGE OF AGRICULTURE
NEW BRUNSWICK, N. J.

High-School Manual for Florida. Prepared by JOHN A. THACKSTON and Others. Gainesville: University of Florida, 1912. Pp. 146.

This bulletin of the University of Florida for the guidance of high-school teachers and principals is admirably adapted to the needs and present possibilities of a state whose educational system is passing out of the primitive stage into a period of strong progress. The manual is noteworthy in that it is up to date, progressive, practical, modest, and free from fads. It aims at the modernization of the high-school course, and points the way along lines that promise results far superior to those of the traditional, largely disciplinary routine. Especially noteworthy is the humanistic emphasis in the sections devoted to the various high-school subjects, particularly the sciences. They are to be taught as human interests, in relation to man and his needs. The section on Civics is a reconstruction of the course in that subject, so as to give a practical study of society, including such topics as local history, local geography, local industries, communication, organized community life, public health, and sanitation, etc. It could be wished that along with these progressive suggestions touching technique and curriculum the editor had brought out explicitly the present need for emphasis on the spirit of high-school teaching. When calling attention to the loss from constant change of teachers, he might have shown that while by paying big salaries the school may get skilled pedagogues and technical excellence of output, it is only by paying the bigger price—by giving to the teacher freedom to do for his pupils the best that he knows and feels—that real teaching can be secured. If, however, the schools of Florida rise to the standard set by this bulletin, there will be a notable advance in efficiency, and the same would be true of many another state.

A. W. CALHOUN

LENOX COLLEGE

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BOOKS RECEIVED

EDUCATION

Fagan, James O. The Autobiography of an Individualist. Boston: Houghton Mifflin Co., 1912. Pp. iii+290. $1.25.

Luckey, George Washington Andrew. Outlines of the History of Education. Second Edition Revised. Lincoln: University of Nebraska Press, 1912. Pp. 147.

Parker, Samuel Chester. A Textbook in the History of Modern Elementary Education, with Emphasis on School Practice in Relation to Social Conditions. Boston: Ginn & Co., 1912. Pp. xxv+505. Illustrated. $1.50.

Pfeiffer, Georg. Repertorium der pädagogischen Literatur der Jahre 1906–1911: Sach- und Autorenregister zur *Pädagogischen Jahreschau*, herausgegeben von Eduard Clausnitzer. Leipzig: Teubner, 1913. Pp. iv+104. M. 2.

Riley, Athelstan, Sadler, Michael E., and Jackson, Cyril. The Religious Question in Public Education: A Critical Examination of Schemes Representing Various Points of View. London: Longmans, Green & Co., 1911. Pp. vi+350. $2.00 net.

Second International Moral Education Congress (The Hague, August 22–27, 1912). Papers Contributed by American Writers and Review of Recent American Literature on Moral Education. (Felix Adler, Chairman American Committee.) New York: The American Committee of the International Congress (2 West 64th street), 1912. Pp. iv+195. $0.60.

Terman, Lewis M. The Teacher's Health: A Study in the Hygiene of an Occupation. (Riverside Educational Monographs, Edited by Henry Suzzallo.) Boston: Houghton Mifflin Co., 1913. Pp. xv+137. $0.60 net.

ENGLISH

Abernethy, Julian W. Correct Pronunciation: A Manual Containing Two Thousand Common Words That Are Frequently Mispronounced, and Eight Hundred Proper Names, with Practical Exercises. New York: Charles E. Merrill Co., 1912. Pp. 173. $0.75.

Babbitt, Irving. The Masters of Modern French Criticism. Boston: Houghton Mifflin Co., 1912. Pp. xiii+427. $2.50 net.

Erskine, John. Selections from Tennyson's *Idylls of the King*. New York: Henry Holt & Co., 1912. Pp. xxxi+178. Illustrated.

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FRENCH AND GERMAN

Passy, Paul. Petite phonétique comparée des principales langues européennes. Deuxième édition revué et complétée. Leipzig: Teubner, 1912. Pp. iv+145. M. 2.00.

Prehn, August. A Practical Guide to Scientific Study of the German Vocabulary. (Oxford German Series. General Editor: Julius Goebel.) New York: Oxford University Press, 1912. Pp. xvii+257. $0.75.

HISTORY

Howe, Samuel Burnett. Essentials in Early European History. New York: Longmans, Green & Co., 1912. Pp. xvii+417. Illustrated. $1.50.

Robinson, James Harvey, and Beard, Charles A. Outlines of European History. Part II. From the Opening of the Eighteenth Century to the Present Day. Boston: Ginn & Co., 1912. Pp. ix+555. Illustrated. $1.60.

MATHEMATICS AND CHEMISTRY

Smith, Percey F., and Gale, Arthur Sullivan. New Analytic Geometry. Boston: Ginn & Co., 1912. Pp. x+342. Illustrated.

Stone, John C., and Millis, James F. Elementary Geometry, Plane. Boston: Benjamin H. Sanborn & Co., 1910. Pp. ix+252.

Unger, M. S. H. Review Questions and Problems in Chemistry. Boston: Ginn & Co., 1912. Pp. v+106. $0.50.

VOCATIONAL GUIDANCE AND MANUAL TRAINING

Laselle, Mary A., and Wiley, Katherine E. Vocations for Girls. With an Introduction by Meyer Bloomfield. Boston: Houghton Mifflin Co., 1913. Pp. x+139. $0.85.

Moore, Harris W. Manual Training Toys for the Boy's Workshop. Peoria, Illinois: The Manual Arts Press, 1912. Pp. 111. Illustrated. $1.00.

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CURRENT EDUCATIONAL LITERATURE IN THE PERIODICALS[1]

IRENE WARREN[2]
Librarian, School of Education, University of Chicago

Andress, J. Mace. The Sunday-school and educational progress. Educa. R. 44:502–6. (D. '12.)

Angell, James Rowland. The duplication of school work by the college. School R. 21:1–10. (Ja. '13.)

Baker, Elizabeth W. The problem of two vocabularies. Educa. 33:238–42. (D. '12.)

A plan to overcome the disparity between the pupil's classroom and ordinary speech by creating greater stimulus to expression in the classroom.

Bawden, William T. Second National Conference on Vocational Guidance. Voca. Educa. 2:209–17. (Ja. '13.)

Boas, Franz. The growth of children. Science 36:815–18. (13 D. '12.)

A critical discussion of recently determined facts regarding variability in growth.

Butler, Nicholas Murray. The service of the university. Educa. R. 44:511–20. (D. '12.)

Chapman, John Jay. A nation's responsibility. Educa. R. 44:460–65. (D. '12.)

Children in the canneries. Lit. D. 45:1110–12. (14 D. '12.)

Cooley, Edwin G. The need for vocational schools. Educa. R. 44:433–50. (D. '12.)

Cunliffe, John W. College English composition. English J. 1:591–600. (D. '12.)

A discussion of aims and methods.

Davenport, Eugene. Unity in vocational education. Voca. Educa. 2:186–88. (Ja. '13.)

Dean, Arthur D. The mission of the technical high school. Voca. Educa. 2:177–85. (Ja. '13.)

[1] *Abbreviations.*—Child Wel. M., Child Welfare Magazine; Educa., Education; Educa. R., Educational Review; El. School T., Elementary School Teacher; English J., English Journal; Lit. D., Literary Digest; Psychol. Clinic, Psychological Clinic; School R., School Review; Voca. Educa., Vocational Education; West. J. of Educa., Western Journal of Education.

[2] Annotations by Dr. Frank N. Freeman.

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Fleagle, B. E. Oral English in the high school. English J. 1:611–18. (D. '12.)
A description of methods and devices used by the author.

Foerster, Norman. Literature and the undergraduate. Dial 54:3–5. (1 Ja. '13.)

Ford, R. Clyde. Circulating libraries in France. West. J. of Educa. 5:448–53. (D. '13.)

Good and bad in college fraternities. Lit. D. 45:1179–80. (21 D. '12.)

Gutzmer, A. The work done by the German Subcommittee of the Teaching of Mathematics. Science 36:818–20. (13 D. '12.)
A brief description of the subject-matter of the report.

Hahn, Walter L. A plea for out-of-door zoölogy. School R. 21:50–54. (Ja. '13.)

Hunsaker, A. F. Civics in the secondary schools. Educa. 33:228–37. (D. '12.)
Value, aims, and methods.

Johnson, Franklin W. The Hillegas-Thorndike scale for the measurement of quality in English composition by young people. School R. 21:39–49. (Ja. '13.)

Judd, Charles H. The meaning of secondary education. School R. 21:11–25. (Ja. '13.)

Kahn, Joseph. Why teachers fail: fundamental causes and remedies. Educa. 33:193–199. (D. '12.)
A reduction of main causes of failure to inability to understand and apply the principles of the science of pedagogy.

Kent, William. Academic efficiency. Science 36:841–50. (20 D. '12.)
A proposal program for the investigation of educational efficiency according to the methods which are being introduced into industry.

Koeppel, George. Observations concerning the organization of schools and certain phases of educational work in Germany. II. El. School T. (Ja. '13.)

Lathrop, Julia C. The federal children's bureau. Child Wel. M. 7:117–20 (D. '12.)
The need of registration of births.

Leavitt, Frank M. The continuation school: Cincinnati's examples. Voca. Educa. 2:218–34. (Ja. '13.)

Martin, E. S. Old-fashioned children. Harper 126:237–46. (Ja. '13.)

Maxwell, William H. My ideals as superintendent. Educa. R. 44:451–59. (D. '12.)

Monroe, Walter S. Analysis of Colburn's arithmetics. IV. El. School T. (Ja. '13.)

Morton, William Henry Stephenson. Retardation in Nebraska. Psychol. Clinic 6:181–97. (D. '12.)
A statistical investigation of the amount of retardation in smaller cities of Nebraska with discussion of results.

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Parker, S. Chester. Bibliographies, briefs, and oral exposition in normal schools. El. School T. (Ja. '13.)

Practical education in Canada. Lit. D. 45:1118–19. (14 D. '12.)

Price, William R. The second year of a modern language. School R. 21:26–38. (Ja. '13.)

Prosser, Charles A. Facilities for industrial education. Voca. Educa. 2:189–203. (Ja. '13.)

Ragland, Fannie. Development of agricultural education in the rural schools of Ohio. Voca. Educa. 2:204–8. (Ja. '13.)

Rapeer, Louis W. Outlines of educational hygiene, emphasizing medical supervision. Educa. 33:200–207. (D. '12.)

Raymer, J. W. Advisory systems in high schools. Educa. R. 44:466–91. (D. '12.)

Riordan, Raymond. Does vocational training fail to build character or create a conscious citizenship? Craftsman 23:449–53. (Ja. '13.)

Smith, Frank Webster. The normal school ideal. Educa. 33:223–27. (D. '12.)

The value of certain of the courses in the normal school.

Stockton, J. L. Principles of a revision of a course of study applied to geography. El. School T. (Ja. '13.)

(A) strike to end school night-work. Lit. D. 45:1125–26. (14 D. '12.)

Tombo, Rudolf, Jr. University registration statistics. Science 36:887–94. (27 D. '12.)

Town, Clara Harrison. The borderland between feeblemindedness and insanity. Psychol. Clinic 6:198–202. (D. '12.)

A detailed description of a case which is not satisfactorily included in the usual classifications but which manifests symptoms of insanity and feeblemindedness.

Wild, Laura H. Training for social efficiency: the relation of health to efficiency. Educa. 33:208–22. (D. '12.)

Wilhelm Münch. Educa. R. 44:507–10. (D. '12.)

Woolley, Edwin C. Student's use of the dictionary. Educa. R. 44:492–501. (D. '12.)

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THE SCHOOL REVIEW

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THE JUNIOR COLLEGE, OR UPWARD EXTENSION OF THE HIGH SCHOOL

C. L. McLANE
Fresno, California

Geographic-educational conditions in California are such as to demand that the public-school system, in many sections of the state, shall meet the requirements for advanced training above the four-year high-school course.

If the map of California were placed on the eastern seaboard of the United States it would cover the whole of New Hampshire, Vermont, Massachusetts, Rhode Island, New Jersey, Delaware, Maryland, and about two-thirds of New York, Pennsylvania, Virginia, and North Carolina. While the population of California is less than that of each of several of the above-mentioned states, on the other hand, two or three small areas in this state each contain a greater population than that of each of four of the smaller states mentioned. Besides the two great universities in California—the state university and Stanford University—both of which are located near San Francisco, the state is without university advantages such as are afforded by a large number of colleges and universities distributed over like areas in the eastern portion of this country. Thus when one considers only the largest of the eastern universities and thinks of their geographical distribution from Harvard at the north to Johns Hopkins at the south, the concentration of university opportunities in California becomes obvious. The element of distance is a most important factor to

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the individual in planning his educational career. Even though the financial consideration of railroad fare be overcome, a parent will often hesitate to send his child so far from home that one, or possibly two, visits a year only are possible. Parents are justly concerned as to the advisability of severing home ties and the home restraints that should often continue for some years after the age of graduation from the high school as this latter institution is commonly organized in the United States. Some towns in California are almost as far, on an air-line, from either of the universities as Chicago is from New York, and many are much farther by the nearest railroad.

The above-mentioned conditions had much to do with the passage of a law by the legislative session of 1907 giving high schools the authority to extend the scope of their work to include two years of college training. The text of the law is as follows:

> The high-school board of any high-school district, or trustees of any county high school, may prescribe postgraduate courses of study for the graduates of such high school, or other high schools, which course of study shall approximate the studies prescribed in the first two years of university courses. The high-school board of any high-school district, or trustees of any high school wherein such postgraduate courses of study are taught, may charge tuition for pupils living without the boundaries of the district or county wherein such courses are taught.

It will be noted that the law does not make provision for financing this advanced work, leaving it to local communities to provide the necessary funds. It seems that the framers of the law intended to put this higher educational work on the same basis as the regular high-school course, so far as state aid and local financing are concerned. At the next session of the legislature succeeding the passage of this law, a bill was passed providing substantial state aid for such schools as desired to take advantage of this movement; but owing to the unusual draft on the state exchequer the governor vetoed the measure. It seems quite probable that such a measure will be presented again at the coming session, with a more favorable outlook toward meeting the financial obligations involved.

It is well known that California is most liberal in providing financial support for its educational institutions. It may there-

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fore be assumed that it was not the lack of financial support that caused a delay of three years from the time the legislature passed the above-mentioned act before the first steps were taken by any school department to put it into effect.

As previously stated, the population of California is found to be grouped in several important centers. These in order of population are: the Bay section with San Francisco as its nucleus, southern California with Los Angeles as its center, Sacramento Valley with Sacramento as its center, San Joaquin Valley with Fresno as its center, extreme southern California with San Diego as its center, then several smaller groups along the coast and in the northern part of the state. Each of these local centers has its own problems and conditions in the way of government, climate, industries, commerce, and education.

The Bay section is well provided with institutions for higher educational training as before stated. Southern California has several colleges and universities of secondary rank which are equipped to meet local demands. The center of population in the Sacramento Valley section is less than one hundred miles from the state university. The San Joaquin Valley section, however, the center of which is over two hundred miles from any institution of higher education, seemed to be the most logical division in which the "junior college" should have its birth.

The first movement toward making use of this "upward extension" law was made by the city superintendent of the Fresno schools in June, 1910, when a circular letter was sent to patrons of the Fresno High School and to the principals of various other near-by high schools. Over two hundred favorable replies were received with not one adverse opinion. A report was then presented to the local board of education presenting conditions and arguments looking toward the establishment of an institution of higher learning in connection with the local high school. The substance of this report will, no doubt, best present the leading facts pertaining to the organization and establishment of this first "junior college."

There is no institution of higher education within two hundred miles of Fresno where students may continue their studies beyond the regular high-school courses. Many of our high-school graduates are but seventeen or eighteen years of age and parents are frequently loath to send these young

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people so far from home. Many who desire to continue their studies cannot afford the expense necessary to college attendance where the items of room and board mean so much. Authorities in the University of California and Stanford University have been consulted in this matter and seem much interested in the project. Both have promised such assistance as they may be able to render in planning courses and securing instructors. There seems to be no question as to the possibility of doing work of such merit as will command recognition from these institutions. The following general aims are set forth:

1. To give to young people of this section of the state, who cannot afford to go to either of the universities, an opportunity to continue their studies at home.

2. To provide practical courses in agriculture, manual training, domestic science, and other technical work in addition to the regular academic courses.

3. To carry students through the first two years of a college course, thus enabling them to complete a four years' course with but two years' residence at the university.

The report concluded with the following recommendations:

1. That the Board of Education authorize the establishment of a two years' postgraduate course along the lines above mentioned.

2. That mathematics, English, Latin, modern languages, history, economics, and technical work be the general courses offered for the first year.

3. That a competent person be secured as dean or head of this department, with such assistants as the attendance and courses desired may justify.

This report was adopted and the superintendent was authorized to carry out the details preparatory to opening this department along with the high school in September following.

Several vacancies occurring at this time in the high school, including the principalship, it was thought best to reorganize, placing the new principal over the entire institution including the "junior college," and selecting for the heads of such departments as were vacant instructors with college experience and thorough university training. This plan was carried out, it being understood that these special instructors should take such regular high-school classes as might be required to fill in their daily programs. Three such teachers were selected, one of whom was given the title "Dean of the Junior College." The state university authorities rendered valuable assistance in selecting the head of the school as well as these assistants.

Special equipment was purchased for scientific and mathe-

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matical instruction and quite a number of books added to the library, the entire cost not exceeding $1,500. The extra expense for salaries for the first year was $3,200, counting actual time devoted to junior college classes. The enrolment for the first year was twenty, which number has been doubled in this the third year. The cost for maintenance now runs about $4,200 per annum, making the expense per capita for this work run a little in excess of $100 per annum—somewhat larger than that of regular high-school instruction. About one-third of the attendance in this department is from other high schools in this section of the state. A tuition of $4 per month is charged these non-resident students—the same as charged for the regular high school.

In September, 1911, the Fresno State Normal School was established and temporarily housed in the high-school building, and conducted in conjunction with the junior college. No doubt many students were enrolled in the normal at this time who would otherwise have taken regular junior college work. On the other hand, scores of normal students have elected college subjects where their courses permitted electives outside their regular professional studies.

It cannot be said that the junior college has attracted to it all or even a comparatively large part of the students in this section of the state who are pursuing college courses. It would have been quite impossible for a new institution, without adequate funds or equipment, to care for the hundreds who take up higher educational work. Nor was it to be expected or even desired that such a result would follow. In many instances it is desirable that a student have a new environment—a new setting, so to speak—to give new zest and an added stimulus to his efforts. Even though a local institution offers equal advantages, it is often advisable to throw the young high-school graduate on his own responsibility for a time by severing home relationships. It is not, therefore, the aim of this institution to take over the entire responsibility of doing the first two years of college work. While authorities in both of the California universities seem to look forward to the time when they will be entirely relieved of this first two years of college work,

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it will require substantial aid from the state, and years of effort and experimentation, with earnest co-operation on the part of the universities, to bring about such a result. At the very outset many conditions and problems arise, and success or failure depends on the outcome of their solution. First, there is the natural prejudice which arises in the minds of the teachers in the regular high-school faculty, who have so long constituted the *corps d'élite* of the school department, against adding to the school a department of higher educational standing. It might seem an easy solution of the question merely to add two successive years of work to the regular high-school courses, using teachers already in the school so far as they are qualified to do the higher work. This plan has been followed in one or more of the cities of the state with the result that students look upon it as mere advanced high-school work instead of distinctive college work. Then if it is the purpose of the school to meet the standards of the universities, and gain their support and confidence, it is necessary to put special instructors in charge who shall at once command the attention and confidence of both the student and the university. As before stated, conditions in Fresno were quite favorable in meeting this problem. A separate faculty, with one of the number chosen as dean, was selected; it being the purpose to have a separate student body, and in every possible way endeavor to impress upon students and the public at large the fact that serious work of distinctive college standards is being undertaken.

The opinions of some leading educators will show the interest that this movement has developed in California.

I am looking forward, as you know, to the time when the large high schools of the state in conjunction with the small colleges will relieve the two great universities from the expense and from the necessity of giving instruction of the first two university years. The instruction of these two years is of necessity elementary and of the same general nature as the work of the high school itself. It is not desirable for a university to have more than about two thousand students gathered together in one place, and when the number comes to exceed that figure then some division is desirable. The only reasonable division is that which will take away students who do not need libraries or laboratories for their work. The value of the university is highly dependent

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on its possession of great and expensive libraries. I am interested in the experiment which is going on at Fresno, and in the high school in Los Angeles.

Very truly yours,

DAVID STARR JORDAN
President Leland Stanford Junior University

May 16, 1912

Farsighted and progressive educators are agreed that the establishment of "junior colleges" denotes a necessary development in the right direction. Such extensions of the four-year high school would (1) enable the universities to concentrate their efforts on university work proper, (2) provide for young people from eighteen to twenty years of age the immense educational advantage of being taught and trained in small groups, not far from home, (3) make it possible for thousands who are unable to attend a university to round out their general education, (4) reduce very materially the cost of college and university education, (5) provide—a most important factor—finishing vocational courses in agriculture, the industries, commerce, applied civics, domestic science, etc., which cannot be adequately provided either by the four-year high school or by the universities, (6) tend to create a number of educational centers of a high order whose influence for good would extend in many directions over large areas of the state.

The state university has stood for the junior college plan for more than fifteen years, and its policy is to further the establishment of junior colleges in every possible way. This implies of course that the university stands ready to recognize the courses of junior colleges as the equivalent of corresponding courses at Berkeley and to give full credit for successfully completed work.

The city of Fresno is to be greatly congratulated on being the first city in the state to establish a junior college. May this prosper and become year by year more useful, especially to those who would otherwise have to forego the chance of higher vocational training. Those recommended for university work at Berkeley will, I feel confident, have no reason to regret that their Freshman and Sophomore work was done in Fresno.

ALEXIS F. LANGE
Dean of the Faculties, University of California

May 30, 1912

Excerpts from a circular prepared by F. Liddeke, principal of the Fresno Junior College and High School:

Professor Alexis F. Lange, dean of the University of California and head of its educational department, during his recent visit of inspection addressed the Seniors and college students. He traced the development of the movement for the upward extension of high schools in California. This movement aims to relegate the work of college Freshman and Sophomore years in uni-

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versities to the high schools sufficiently equipped to carry such work, and so to have American universities gradually approximate to the continental European universities. It is becoming more and more necessary to eliminate secondary studies in our highest institutions of learning, and to put them in high schools where they belong.

It was furthermore stated that because of having to mass lower division students at the University of California in very large classes, it is impossible to give them anything like the opportunities they need. The instructors and the equipment are overtaxed. It was asserted expressly that Fresno students had a better chance and could do better college Freshman and Sophomore work in their "junior college" than at the university. Here at home, in their small classes they could get closer to, and keep closer to, their studies and their instructors.

One point was emphasized clearly; namely, that the University of California would recognize, and could afford to recognize, the college work done by Fresno students in their home institution, that if the principal approved of the college work done by any student in Fresno High School, that work would be accepted by the university, and it would count in every respect the same as if the work had been done at the University of California and without the necessity of any further examinations.

Dr. Lange also dwelt on the opportunity upward extension in the high school affords to students who will never go to a university, and never intend to go, and how desirable it is for this college work to adapt itself to the needs of the community. He said it is cause for just pride and congratulation for Fresno High School to be a pioneer, by a whole year, in this important movement. Santa Barbara has followed this year, and Los Angeles. Others will follow next year.

Dr. Lange also stated that the Fresno six-year high-school course is also preparatory to the affiliated colleges at San Francisco, Hastings College of Law, and the California College of Medicine and Dentistry. Commencing with next year these colleges will require for entrance two more years of preparatory studies in addition to graduation from an accredited high school. Students promoted from Fresno Junior College will be admitted to any of these affiliated colleges on equal terms with students who have completed the Sophomore year at the University of California, and without any examinations or conditions.

At the University of California the courses are divided into "lower division" and "upper division." The lower division includes the Freshman and Sophomore years, and the completion of the lower division work entitles the student to the "junior certificate." Only then, when he has qualified for this certificate, is the student enabled to become a member of the university proper, for the real university commences with the Junior year and extends through the graduate courses. Hence, the first two college years are essentially pre-

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paratory, for the work of these years is only a continuation of preparatory education. By commencing to relegate all this secondary work to the secondary schools, the university aims to lessen the swamping of its premises with blessings in the way of Freshmen and Sophomores it is not equipped to care for. The present equipment is only sufficient for upper divisions, real university work. In view of the rapidly increasing population of this state this policy becomes all the more imperative.

Stanford University is also backing this upward extension movement. In fact, the term "junior college" is said to have originated with President Jordan. Professor Rentley, Stanford inspector, during his visit last semester expressed great interest and solicitude in having lower college work done in high schools. Our two great California universities are one in their attitude toward "junior college" work in our secondary institutions.

In addition to the advantages already indicated, the fact should commend itself to parents particularly that they are enabled to have their children at home, and under home influences for two years longer, to say nothing of economy in expenses. This applies more especially to students living in or near Fresno, but also in the case of students from more remote homes who are enabled to be at home during the week end.

The following details with regard to the faculty and the courses offered may be of interest for the purpose of showing the equipment of the school. The academic training of each teacher is indicated as perhaps the most important item in describing each department.

JUNIOR COLLEGE FACULTY

F. Liddeke, principal.
A.B., Harvard University; Berlin University.

G. W. Huntting, dean of College Department. College English and Latin.
A.B., Columbia University; M.L., University of California.

J. A. Nowell, vice-principal of high school. College history.
A.B., Stanford University.

H. W. Stager. College mathematics.
A.M., Stanford University; Ph.D., University of California.

J. A. Daly. College physics.
B.S., University of California.

B. A. Stagner. College chemistry.
Kirksville State Normal; A.B. and B.S., University of Missouri.

Miss Katherine M. Douglas. College French.
A.B., University of California; University of Paris.

Miss Florence Robinson. College German.
A.B., University of California.

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Courses offered	Years in course
English, 2 years	5 and 6
Latin, 2 years	5 and 6
German, 2 years	4 and 5
French, 2 years	4 and 5
European history	5
Industrial history, alternate years	5
Institutional history	6
Solid geometry	
Trigonometry, ½ year	5
Analytical geometry, ½ year	5
Algebraic theory, ½ year	5
Descriptive geometry, ½ year	5 and 6
Calculus, differential	
Calculus, integral, 1 year	6
Organic chemistry, 1 year	5 and 6
Chemical analysis, qualitative and quantitative, 1 year	5 and 6
Advanced physics, 1 or 2 years	5 and 6
Surveying, 1 year	5 and 6
Machine shop, 1 year	5 and 6

Many other high schools in the state have taken up this advanced work, but probably none under so definite and distinctive an organization as that under which the Fresno movement is carried on. Several, however, are now laying the foundation for the full two years' college work with a more or less distinctive organization. From the many inquiries received from leading educators of other states it is evident that this movement is also attracting some attention elsewhere.

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A HIGH-SCHOOL COURSE IN FIELD GEOGRAPHY

GEORGE J. MILLER
University High School, Chicago

The great importance of field work in all the natural sciences has long been recognized. If its need is any more pressing in one group of sciences than in another those sciences are geography and geology. Field geography obviously does not mean the naming and locating of cities, capitals, rivers, etc., but involves the recognition and interpretation of geographic features with special reference to plant and animal life, especially human life. Geography is primarily a field subject and only secondarily a textbook or schoolroom subject. Mountains, plains, plateaus, glaciers, arid and moist climates, with their life relationships, cannot be brought to the student. He can read *about* them but fail completely to recognize them in the field. This is well illustrated by a young university graduate who accompanied our party last season. He had "read about terminal moraines" and "wanted to see what one looked like." After riding for hours over the irregular surface of one, climbing some of its slopes so steep that he had to walk and urge his horse up after him, after camping for several days on the shores of a beautiful lake held in by it, after ascending the old glacial valley that had supplied the material for the moraine, the young man secured an appreciation of a common natural feature that his entire high school and university training had failed to give him. Since such a vital part of geography teaching lies out of doors, what is the teacher to do? The obvious answer is, Go out of doors and do it. But this is far easier said than done and no one has satisfactorily solved the problems of field work, especially in secondary schools.

For several years I have conducted local field work with my classes, but always have felt the need of more extended work. During the past five years there have been many enthusiastic field students in my classes, and they have frequently suggested that a

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long-distance trip be taken to study many of the interesting things about which they had read but which they could not study at first hand. This suggestion with a definite plan of execution was presented to Principal Franklin W. Johnson, of the University High School, and met with his hearty approval. The school, as is to be expected, was not prepared to underwrite the expense of such an expedition and, therefore, I assumed the financial responsibility. The entire cost was met by members of the party. The result was the establishment in the University High School of a distinct course in field geography, open to any boy in the school, and offering a half-unit credit. To assure a party, and lessen the individual expense, boys not seeking credit were admitted. Contrary to the opinion of some, this plan added to the interest of the whole party, rather than detracted from it. In fact, it was a common occurrence to find non-credit boys arguing over a field problem or attending the conferences to learn about the things they were seeing.

The trip, therefore, aimed first to accomplish a successful course in field geography, including the constant use of topographical and geological maps and such instruments as the compass and aneroid barometer, but at the same time secured vigorous, healthy out-door exercise in the pure mountain air. It also placed together in the intimacy of camp life a group of strong, active boys; a situation that soon brings out the good and weak qualities of every individual, and a situation that forces the individual to correct his weakness. Only those who have camped with boys—walked, ridden, eaten, played, slept with them, day after day—can appreciate how quickly the strong and weak points are discovered, and with what relentless energy a boy's weaknesses are kept before him until he recognizes and corrects them. This "rubbing up against his fellows," learning to smile in sunshine, in rain, or in snow, to overcome obstacles that have seemed insurmountable to him, is an education within itself, at least to many. Perhaps it is worth as much, or more, than the course in geography itself.

REGION SELECTED

The portions of our own country that offer suitable conditions for field geography are very numerous, but the region selected was the

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Jackson Hole country of Wyoming and the Yellowstone National Park. The journey to this region offered an excellent opportunity to study the climatic change from the moist Chicago region to the aridity of Utah and Idaho. It also took the class across plains, mountains, and plateaus, with their accompanying changes in altitude, climates, and life relationships. Jackson Hole is the name applied to a broad flat-bottomed valley in northwestern Wyoming. It is about 45 miles north by south and about 15 miles east by west, and is bordered on the west by the Teton Mountains, and on the east and south by other ranges. There are only two roads leading into this region from the west and only trails or very poor roads from the east and south. A good road enters the region from the north leading out of Yellowstone Park. All these roads are relatively modern. From this description it will be seen that this region was well-nigh inaccessible in pioneer days, and even today it cannot be reached during part of the year except on snow shoes. In the early days of Wyoming this inaccessibility made it the hiding-place of horse and cattle thieves. Those days are gone, but the same physical conditions prevail and make it an oasis of the American frontier. A few hardy settlers have pushed over the mountains into this oasis and are truly on the frontier of the settlement that has grown up around them. The telephone now extends into the region and, when it works, helps to keep the settlers in touch with the outside world. Evidence of the frontier spirit is shown in the complete pleasure that a whole family enjoys in traveling 75 to 125 miles across a mountainous country to attend a harvest jubilee or to celebrate the Fourth of July. Even then the place of meeting may be from 30 to 40 miles from the nearest railroad.

From the viewpoint of geography and its allied sciences this region presents many interesting features for study. The Snake River which traverses the area from north to south has cut terrace upon terrace from its gravel filled floor, while glaciers have plowed out U-shaped valleys in the bold, rugged Tetons, and, depositing the drift in semicircular ridges at the mountain base, have formed numerous beautiful lakes. Here the boy has the opportunity on many side trips to traverse regions seldom if ever visited by man

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and study at first hand the work of Nature in its undisturbed condition. There is something that inspires a boy to the love of Nature as he is guided through a pathless mountain region and realizes that he is seeing things and treading ground that very few, if any, have ever trodden before.

As Jackson Hole is an oasis in the American frontier in which a few pioneers are now collected, so is it an oasis for many wild animals. There are now within its area about 20,000 elk, the last of the thousands that once inhabited our western mountains. During the summer they feed along the mountain sides, especially east of the Hole, but during the winter they descend in great herds to the grasslands along the Snake River and its tributaries. Most of this area is a national forest and game preserves, which assures the protection and conservation of wild life. It is evident therefore that besides being a rich field for geographic study Jackson Hole offers the great advantage of being little changed by man.

The splendid opportunities for study in Yellowstone Park are so well known that they require no discussion here. Few places in the world possess such an array of hot springs, geysers, waterfalls, canyons, vulcanism, and glaciation; geological features that have been the antithesis of each other, occurring in the same region, present to a boy with great forcefulness the variations in the earth's history.

METHOD OF TRAVEL AND ROUTE

The party left Chicago in a special sleeping-car attached to the regular train. This car was used exclusively by the party throughout the entire rail journey. The route followed led through Omaha, Denver, Royal Gorge of the Arkansas River, across the Rocky Mountains by way of Tennessee Pass, Salt Lake City, and to St. Anthony, Idaho. Stops were made at Denver and Salt Lake City. At St. Anthony traveling clothes were exchanged for field clothes, each boy was provided with a saddlehorse, and the 500-mile journey overland began.

Provisions for such a journey must be carried from the start, and together with camp equipment and personal baggage require several four-horse wagons, the number required varying with the size of the party. Last season the party consisted of 15 boys, 2 instruct-

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ors, and 6 employees. Twenty-seven horses were used besides a few extras hired to help over especially bad roads. Several extra saddlehorses are always taken along, as numerous accidents may happen, such as sickness, or a horse may be lost permanently by straying at night, or he may break through the crust of a hot spring while grazing and be scalded to death. All these things are liable to occur the same season. Stray horses have the habit of herding with elk, and it is well-nigh impossible to catch them.

A route was followed southeast from St. Anthony, crossing the Teton Mountains by way of Teton Pass and entering Jackson Hole near the southern end, thence north along the east flanks of the Tetons to the south entrance of Yellowstone Park. Several days were spent in camp and in making side trips in the Jackson Hole region. The first camp in the Park was on Lewis Lake, and side trips were made to Pitchstone Plateau, Heart Lake, and the Red Mountains, from which came most of the lava covering the surrounding country. From this camp the party journeyed to Yellowstone Lake, Yellowstone Canyon, Mount Washburne, Tower Falls, Mammoth Hot Springs, Lower and Upper Geyser Basins, and other side trips were made to the crest of the Gallatin Mountains and Shoshone Lake. After a last look at Old Faithful, the return journey was begun and the Park was left behind at Yellowstone, Montana. From this point the trip to Chicago was made by way of Pocatello and Cheyenne across the bad lands of Wyoming.

CHARACTER OF FIELD MATERIAL STUDIED

Climate.—The question naturally arises, What kind of field work can be done successfully with a class of this kind? Obviously nothing of such detailed nature as would satisfy a field geologist or any other field specialist should be attempted. In the following outline no attempt is made to describe fully just what was done or to give a description of the country traversed. But it is designed to show that there is an abundance of material suitable for study.

Probably the first large problem that confronts the student is the change in climate as he passes from Chicago to Utah and Idaho. He has had textbook knowledge of the situation, but this portion of the journey lays before him a partial climatic cross-

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section of the United States. As he crosses Illinois, Iowa, and eastern Nebraska, he is confronted by excellent farms, well-kept farm homes, and a luxuriant growth of agricultural and natural vegetation. This luxuriance dwindles into grasslands and sage brush as he approaches the Rockies, and into barren desert, in which the human struggle for existence is successful only where irrigation prevails, as he crosses eastern Utah. In the heart of Utah he finds an oasis—made so by irrigation—and learns to appreciate the hardiness of those early pioneers who crossed the deserts to establish a new colony. It is not unusual to hear a boy say, "Let them have it. They certainly earned it." In this region he notices the distinct terraces extending along the mountain sides, and finds in Great Salt Lake the remnant of an ancient lake whose waves cut the terraces that now stand many hundreds of feet above the present lake level. What must have been the climatic conditions at that time? Did the ancient lake have an outlet? Was it always salty? What caused the change? What were the conditions at home at the time? are some of the problems that arise at once. In crossing the mountains he is confronted with the climatic change with altitude. He has read about it, but careless covering at night emphasizes the fact. He notes the tree line and barren snow-capped peaks, the abundance of trees on one side of a range and the sparsity on the other and demands an explanation. If interested in photography he notes the clear sky and clear air and seeks directions for proper exposure. If he is working for credit he is keeping notes on all he sees and following his route on the maps. In the Park he finds that the same region has experienced periods of sedimentation, vulcanism, glaciation, and hot springs. These appear at first as very conflicting climatic conditions, but their relationship becomes clear before the trip is ended.

Glacial features.—The gently rolling plains of Illinois and Iowa in contrast with the relatively flat country farther west present the depositional work of the Ice Age, and his curiosity to get onto a glacial moraine is aroused. This curiosity is satisfied by several side trips into the Teton Mountains. Here he sees and travels over the old glacial valleys, notes the characteristic U-shape given them by the glaciers, ascends them and observes the amphitheater-

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shaped cirques at their head often containing small lakes which lie in the eroded rock basins, traverses the terminal moraine which encircles the mouth of the valley, and, still unsatisfied, he wants to "explore some more." Here the questions arise: What has become of the glaciers that once filled those valleys? When and why did they disappear? Was man here at the time? Did trees grow then as now? Will the glaciers ever come again? And he is not slow to tie up these problems with glacial conditions at home and the ancient lake that preceded Great Salt Lake. As he travels through Jackson Hole he is trying to solve the origin of the enormous amount of gravel that forms its floor, but by the time he has passed Jackson Lake—a large glacial lake at the north end—most of his difficulties have been cleared away. These, however are only a few of the many glacial problems that confront him.

Running water.—The broad valleys of the Mississippi, Missouri, and Platte, in contrast with the canyons of the Arkansas, Grand Lewis, and Yellowstone rivers, well illustrate for him the result of stream erosion in plains, mountains, and plateaus. The canyon of the Yellowstone probably leaves the most lasting impression. After climbing more than a thousand feet down its precipitous side and up again—in part by the use of a rope—after finding the cause of its beautiful coloring, after viewing it from many points along its brink, and realizing that the small stream flowing through it has done all the work since glacial times, he feels satisfied that his journey has been well worth while. His problems in stream erosion, however, do not end here because in passing through Hayden Valley he has noticed terraces along the valley sides similar to those around Great Salt Lake. To form these terraces the water must have been much higher than now, and Yellowstone Lake must have extended down Hayden Valley to some point near the Upper Falls. What happened to drain this Lake? With a little assistance he learns of the piracy of the Yellowstone, that the continental divide was shifted, that the drainage of Yellowstone Lake was changed from the Pacific to the Atlantic, and the falls of the Yellowstone were brought into existence. He reconstructs this ancient divide upon his map.

Mesas, buttes, natural bridges, sand bars, valley flats, fans,

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fluvio-glacial deposits, terraces, and bad lands are a few of the other features that requires attention. Some demand more consideration than others and in the entire course the life relationships, especially plant and human, are emphasized more than the physiography or geology of the features themselves.

Rocks and structures.—No effort is made to study rocks in detail but during the trip the student becomes acquainted with the main classes and many specific kinds, such as igneous, sedimentary, metamorphic, and rhyolite, granite, gneiss, basalt, lava, obsidian, limestone, sandstone, etc. He learns these by constant contact with them and seeks an explanation of the conditions that produced such variations. I doubt if anyone can ask more "whys" than a boy in the field. During the journey to the field each student constructs a rough cross-section of the country from Chicago to Salt Lake City, indicating the classes of rock and the structure. In making this section he learns to recognize, not only the rock, but its position—dipping, folded, horizontal—and perhaps faulting. Another cross-section of the Tetons with their gentle western and steep eastern slope strengthens his confidence in interpretation and directs his attention to many points that might otherwise pass unnoticed. The construction of these sections leads to an explanation of mountain making and many original theories are deduced, often to be destroyed immediately by some other member of the party. It may be said here that all problems are left to the class and never solved by the instructor unless it becomes necessary. He points out errors in solutions offered and may make suggestions, but can usually bring about an agreement without answering the questions outright. A few of the larger problems presented for solution are: Explanation of terraces about Great Salt Lake; origin of Rocky, Teton, Gallatin, Absaroka, and Red mountains; explanation of Pitchstone Plateau and the whole plateau area of the Park; origin of Jackson Hole; what is the best use to which Jackson Hole can be put in the future?

Ground water.—The park is an unexcelled region for the study of hot springs, geysers, and mineral waters. The route followed presents to the student many of the minor features of this sort first, and ends with a study of such climax types as Emerald Pool,

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Giant Geyser, and Old Faithful Geyser. Their origin, form, and kind of deposits, causes of the brilliant and beautiful colors are studied among the formations themselves. The student will discover for himself the differences between the terraced, calcareous formation about the Mammoth Hot Springs and the silicious deposits about the geysers. The explanation of petrified tree trunks standing erect above the surroundings, with glacial drift in the immediate vicinity, presents a situation that, at first, is hard for him to reconcile.

As previously stated, the above discussion does not pretend to cover all the field material studied. Considerable emphasis was placed upon plant life, especially ecological study. This phase of the work was in charge of Mr. W. L. Eikenberry of the University High School and was made a part of all written work and conference discussions. The deep interest of the boy in plant life and its geographic associations was apparent at all times, and the highest credit is due Mr. Eikenberry for keeping this interest at a high pitch. I do not consider that I have solved the problem of field geography, but if the establishment of this course in the University High School has contributed toward its solution I shall feel that the effort has not been in vain. Next season (1913) the same trip will be made during the early part of the summer with a second trip to Glacier National Park during the latter part. The latter trip will be made by pack train, as wagons cannot be used.

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GRAMMATICAL CONCEPTS AND THEIR NAMES

ALFRED DWIGHT SHEFFIELD
Wellesley College

In his lecture on *The Educational Value of the Natural History Sciences* Huxley remarks on the difference between a popular concept and a scientific one. Popular concepts classify things by their felt likeness to typical cases; scientific concepts refer them to definitions. Ask any man "to define a beast from a reptile, and he cannot do it; but he says, 'things like a cow or a horse are beasts, and things like a frog or a lizard are reptiles.'" The scientist, on the other hand, aims at a rigorous description of *reptilia* which shall exclude such *amphibia* as fall within the loose notion "reptile." To him "classification by type is simply an acknowledgment of ignorance and a temporary device."

These words a grammarian reads with the disquieting reflection that some of his staple terms do nothing more nor less than classify by type. When, in *gentleman usher, the foul and the fair, ask that it shall appear*, he calls *gentleman* a "noun," *foul* and *fair* "adjectives," and *shall* a "subjunctive" use, he refers not to a logical definition of "subjunctive," "adjective," or "noun," but to a partial likeness between the locutions here and *typical* locutions, in which the words take these labels by virtue of concurring features of meaning, of sentence-function, and of form. The trouble with a label derived from typical instances is that it tells nothing very *certain* about any given instance. Hearing a given word called a "verb," I *may* be right in understanding that it shows all three verb-features: a notion of occurrence, predicative function, and a form answering to these sense-aspects. It may, however, be a non-typical verb, showing but one or two of these features. Indeed, we here have to do with four aspects of meaning, of which all may appear in one word, or two or more may divide their expression between words of a verb-phrase. The term "verb," therefore, applies to any word-form of a series ascending in sense-complexity about as follows:

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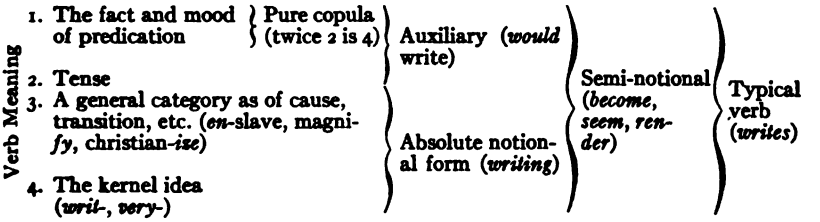
TYPES OF VERB FORM


Verb Meaning
1. The fact and mood of predication
Pure copula (twice 2 is 4)
2. Tense
3. A general category as of cause, transition, etc. (*en*-slave, magni-*fy*, christian-*ize*)
4. The kernel idea (*writ-*, *very-*)
Auxiliary (*would* write)
Absolute notional form (*writing*)
Semi-notional (*become*, *seem*, *render*)
Typical verb (*writes*)

To label a "verb" with any regard to these distinctions we must awkwardly piece out the term: "auxiliary verb," "periphrastic verb," "verb of incomplete predication." And with distinctions of syntax we meet fresh trouble in talking unequivocally. To classify an English word uniting verb meaning with noun function we must hesitate between three terms: "infinitive," "gerund," "supine"—all terms that apply *typically* to verb-forms in Latin.[1]

The makeshifts to which such a nomenclature puts us naturally prompt the question whether the modern grammarian should not scrutinize words for himself, take a clean slate, and set about devising labels that shall satisfy the "scientist." Words are complexes offering three features for classification: (1) content, or independent meaning, (2) function, or use in the sentence, and (3) form. And each of these features presents a workable set of categories. Thus as to content a word means either a thing, or an attribute of quality, behavior, or relation; and its meaning is either descriptive, as in common nouns and notional adjectives, verbs, and adverbs, or simply designative, as in proper nouns and demonstratives. Through this grouping will of course run cross-divisions of "modal content": number, tense, degree. As to function, a word is either (1) a sentence-word (interjection, vocative, imperative); (2) a particle (preposition, auxiliary, conjunction), *marking* sentence-relation for notional words that it presupposes; or (3) a term of syntax, *bearing* the relation—subject, predicate, attributive, or adverbial. As to form, a word may take either mutation or affixes, these being either flectional, expressing sentence-relations directly, or as in—slav-*ery*, *en*-slave—derivative,

[1] In English, lacking so frequently the formal marks, we pretend to parse "by function only"; but of course we can do nothing of the kind with terms which, resting on content and form as well, oblige us to talk of "*nouns* used attributively," of "*adjectives* used substantively," etc.

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making certain sentence-relations forefelt by the word's syntactic habit.[1]

It is evident that no label really tells what "part of speech" a word is, unless it tells us what category it answers to under each of these three headings. The term, that is, should show three elements, designating classes respectively of content, of function, and of form. Where, as often in English, distinctive form is lacking, the third element would of course be dropped. An ideal nomenclature for words would then resemble that for chemical complexes. Thus in

sub-carbon-ate
hypo-sulph-ite
hypo-chlor-ous
per-chlor-ic
chlor-ide
nitr-ate

prefixes, stems, and suffixes refer to three different sets of categories, so that any term varies flexibly in order to apply throughout to the particular complex under view; whereas a term like "adjective" points rigidly to the typical complex, and in particular applications must get part of its reference contradicted, as when we say it is "used substantively." One need but contrast with these terms from chemistry our "preposition," "auxiliary verb," "predicate adjective," "objective complement"—labels that tell little without running to tedious lengths—to realize that terms give a maximum of information for the speech-material used, only when their stems and affixes are codified.[2]

[1] The question will here rise: When are we dealing with different forms of the same word, when with different words? For we have to do (1) with roots + affixes, as in *box-ing*, *box-es;* (2) with total changes, as between *I*, *me;* *am*, *be;* and (3) with distinctions conveyed by the context, as in *my box of books*, *I box my books*, *a box factory*.

[2] A reform so radical as the one here suggested may not seem "within the range of practical politics," but it would not be without precedent. The nomenclature for igneous rocks having grown by mere otiose assent around a clumsy traditional system, four American petrographers published in 1903 a brand new nomenclature, based on quantitative chemical analysis, and on a codifying of the syllables composing their terms. This system, the *Quantitative Classification of Igneous Rocks*, had in 1909, gained such currency as to command its inclusion in *Webster's New International Dictionary* (article "petrography").

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The new names, however, might easily achieve a specious precision with an actual loss of distinctions that the old type-names conserve. If behind "noun," "adjective," "verb," we have *conceptual* types, to which as abstract patterns our ways of thinking conform—just as perceived objects conform to the geometrical types "sphere," "cone," "rectangle," etc.—we cannot treat these terms as mere grammarian's figments. So far as they answer to the notions "thing," "quality," "act," they reflect a metaphysic native to the mind, which resolves the fleeting world into these primordial categories.[1] But they do not so answer completely. Abstract nouns are not names of "things," nor are such verbs as *candēre*, *lie*, *shine*, *remain* clearly names of "acts." Inflected speech, therefore, extends its types of word-form beyond what might seem called for by the kinds of idea. Since goodness is not a "thing," the noun-forms *bonitas*, *bonitatem* need never have appeared, if the adjective-forms *bonum*, *bonī*, *bona* had—like Chinese *hao*—served in syntax for both *goodness* and *good*. If, then, as Sweet says, "inflection is practically nothing but a device for turning a noun into an adjective or adverb,"[2] do we understand *vir tantā bonitate*, *bellī gloria* as identical in sense with *vir tam bonus* and *gloria bellica?* Or does an ideal distinction inhere in noun and adjective as such? Such questions must get answers before we can venture upon classifying words with names that stamp express implications between their content and function, and their form.

If every *systematic* item in words has import, then something of import must attach to the suffixes (as in *great-ness*, *great-ly*) by which a given notion is conformed to more than one cardinal part of speech. Is this an import purely of function, or of ideal form, or of value? According to Van Ginneken it is one of value. Our word categories, he says,[3] take their rise in existential judgments, and reflect degrees and kinds of conviction. Verb and noun answer to the distinction of absolute and relative existence; noun and adjective, to that of real and potential. Stated thus baldly

[1] See H. Bergson, *L'Évolution créatrice*, pp. 325–28.

[2] *Philolog. Soc. Trans.*, 1875–76, p. 493.

[3] Jac. Van Ginneken, *Principes de linguistique psychologique*, Pt. 1.

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his view may command less respect than it deserves; but it seems to read into grammar values that could be felt only in mature reasoning. Such categories as "absolute" and "relative" arise not in the mind's spontaneous reaction upon what is before it, but in a reflective *interpretation* of experience. They presuppose an interest too sophisticated to have been operative in the early days of speech. A truer view is perhaps that of Sechehaye,[1] according to whom noun, adjective, verb, and adverb show "thing," "quality," "act," and "manner," as *categories of the imagination*, to which all ideas are assimilated. Thus where an idea of quality takes noun-forms (*boni-tās*, *great-ness*) it is because when thought in relations that are associated with ideas of things, quality is expressed *under the aspect of a thing*. Hence *bellī gloria*, *man of such goodness* have not the same meaning as *gloria bellica*, *so good a man*, and grammatical terms that would here point to content must recognize the formal types, "noun," "adjective," etc., as imposing upon the root-notion *ideal categories of content* that differ from its logical category.

Besides content and function, words carry a third kind of import, springing from the *speaker's concern* with what he says. With this import we reach beyond the expressive scope of detached words to that of sentences. Sentences and clauses take in predication a sort of psychic stress, marking their *relevance* to the purposive concern that prompts their utterance. Where this concern makes question of verb-form, we talk of *mood*, but some purpose always energizes the sentence-thought, whether it takes expression in mood or otherwise. A "mood-force," answering to some category of the will, inheres in sentence and clause as such: it is simply sentence-value considered with reference to its *kind*. Its varieties appear in the downright attitude of "telling," in the non-committal one of "assuming," in the attitudes of asking, commanding, and exclaiming. Here, then, is a conception apart from which the terms "sentence" and "mood" remain vague. In the "classes of sentence"—assertive, interrogative, imperative, exclamative—grammar recognizes certain types of formula expressive of this modal purport, but it attempts no valid definition of "sentence"

[1] Ch. A. Sechehaye, *Programme et méthodes de la linguistique théorique*, p. 238.

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in terms thereof, and it recognizes the purport as "modal" only in verbs. Mood-force, however, is the dynamic principle in every sentence, as against its static meaning;[1] and it may be conveyed by word-order, (*is he good? how good he is!*) or by special modal adverbs (*perhaps, of course*, etc.).[2] As to sentence-value, then, we have three conceptions to keep distinct: (1) "modal force," which coincides with (2) logical "modality," only when narrowed to a concern with status as regards fact; and (3) "mood," or aspect of verb-form expressing modal force.

Sentence-value offers yet another set of distinctions. The sentence stands to word or phrase as judgment to concept, and since a concept sums within itself the work of its constitutive judgments, it carries their predication implicitly. Where the concept-name is a single word (*man, good, sinner*) this predicative force seems at zero or wholly latent, and the concept is felt as inert matter-for-thought. But the analytic matching of concepts with words must proceed largely in terms of improvised "propositional names"[3] (*man talking, good weather, sin against God*), which show predication in various degrees of articulateness. An amplified sentence, therefore, discloses (1) the explicit predication that imparts its sentence-status as a whole; (2) explicit but subordinate predications; and (3) nearly or quite implicit predications.

Sentence-value, then, lies in the speaker's concern with his utterance. Modal force has its distinctions in the *nature* of that concern; predicative force, in its *degree of immediacy*. The differences of force between a clause, an appositive phrase, and an attributive adjective are differences that maintain within the sentence an adjustment of ideas answering to perspective. Insensibility to its gradations is answerable for depressing faults in a

[1] See my *Grammar and Thinking* (Putnam, 1912), pp. 26–29, 177–78.

[2] Grammar should take more precise account of the difference in adverbial terms between such as modify the whole prediction (*she doubtless smiled*), and such as modify only its notional content (*she smiled cordially*). The former really modifies the copula implied in the verb. A conditional clause has a like effect. In *if you are right, I am wrong*, the if-clause is not a modifier of *wrong;* but its truth is conveyed as standing in a special relation to the other clause's truth. We might, almost, call it a "modal adverbial" clause.

[3] Bertrand Russell, *Principles of Mathematics*, I, 49 f.

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pupil's writing—for the lack of saliency in sense-items most directly relevant, for the flatness of the whole thing: all qualifications lying, as it were, in the same plane, with nothing focalized between the two extremes of unstressed attributives and crassly explicit clauses.

Grammar therefore should name clauses and clause-equivalents in *degrees of "predicative force"* about as follows:[1]

1. CO-CLAUSE (co-ordinate with main clause):
   He must increase: I must decrease.
   God made the country, and man made the town.
2. SUB-CLAUSE:
   Since he must increase, I must decrease.
   He *who hesitates* is lost. We believe *he was a traitor.*
   When John had been disposed of, the class began work.
3. ABSOLUTE PHRASE OR ABRIDGED CLAUSE:
   John disposed of, the class began work.
   The vote was carried, *only three dissenting.*
   I shall be present, *weather permitting.*
   The order is for surrender, *officers to keep their side-arms.*
   If guilty, he shall die. *When in London,* buy cravats. Believe *him to be a traitor.*
4. APPOSITIVE PHRASE OR WORD:
   Ready and determined, Sulla watched their approach.
   Hearing his name, Samuel rose.
   Sulla, *victor,* now offered peace.
   He owned himself *beaten.*

   ATTRIBUTIVE PHRASE OR WORD:
   Guilty soul; *the listening* Samuel; man *of sin; box* kite.

Two reflections seem pressed home by this probing among grammatical concepts. One is that language itself classifies by type, patterning its forms not on general definitions but on immediate analogies, and the grammarian has the peculiar task of applying the logic of science to a matter already wrought upon by this native logic. The other is that choice among grammatical terms is no mere matter of names; for the terms commit us to definite views of grammatical facts.

[1] I have profited by an effective tabular scheme for "clause-reduction" by Associate Professor Josephine M. Burnham of Wellesley.

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HIGH-SCHOOL READING: THE NEWARK PLAN

GRACE THOMPSON
Free Public Library, Newark, N.J.

More than half of the pupils who enter the high schools of the larger American cities have never handled critically as many books as are found on high-school library shelves. They have learned to read in primary schools; read the required books in the grammar grades; become familiar with school or classroom libraries, and possibly used the children's room of a public library; there acquaintance with books ceased for the obvious reason that first-generation Americans do not find a library at home. But, having acquired the ability to read, they do not and cannot stop reading. Their taste is being gradually formed or deformed by the reading of cheap newspapers and cheaper literature at home and on the streets. The corner candy-store sells nickel weeklies and lurid paper-bound books containing tales of thrilling adventure and continuous excitement. Penny dailies provide romance, scandal, and shallow philosophy, until the ability to read becomes more of a danger than a blessing. The result is apparent when boys who cannot be interested in *Ivanhoe* are found with *A Boy on the Curb*, or, *The Secret of a Treasury Note* among their schoolbooks. High-school teachers insist that the average entering student cannot name ten worthy books.

The teacher in the high school is, then, confronted with two problems. He must teach the use of books, and he must create a taste for good reading. Unless our high schools do something like this for their graduates, the four years will be wasted.

The English department of the Newark High School, realizing these conditions, began some years ago to compile a list of books for distribution to the pupils, and to buy the books listed for the high-school library shelves. Year by year, as experience dictated, the teachers added to and eliminated from this list until it reached its present form, a thirty-page pamphlet, *Reading for Pleasure and*

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Profit, A List of Certain Books Which Young People Find Entertaining, Being Chiefly Books Which Older Readers Enjoyed When They Were Young, published by the Free Public Library. The list is the tangible expression of genuine co-operation between the high school and the library. In 1909 the library offered to annotate and print the list, and to provide copies for distribution. The library is careful to buy enough copies to provide for the demand, and to keep them in a special case at the main library reserved for high-school students.

The list was at first distributed to the several classes in sheets. Experience has shown that the list as a whole is more highly prized by the students. Receiving this list in the first year and noting books read through the course, they possess at graduation an enjoyable record of their own reading for four years.

From fifty to one hundred books are suggested for each year. By actually sending pupils to the shelves to select a book from those suggested, overcoming inertia in some and a possible timidity in others, the reading habit is often developed. The student has an opportunity to handle and to examine carefully a great many books that are new to him, and to discover his own taste in reading.

Each student in each term is to report to his instructor in English on one book of fiction, one of non-fiction, and one poem, read during the term, from the list provided. The list from which he is to choose is broad. For the first term, when the desire for reading must to an extent be created, the list is longer and broader than in the succeeding terms. Strange would be the boy or the girl who in this alcove would find nothing to catch the eye and stay the hand.

SEA ADVENTURE

Kidnapped, ROBERT LOUIS STEVENSON.
Captains Courageous, RUDYARD KIPLING.

PIONEER LIFE

The Last of the Mohicans, JAMES FENIMORE COOPER.
The Deerslayer, JAMES FENIMORE COOPER.

NEW ENGLAND LIFE

The House of the Seven Gables, NATHANIEL HAWTHORNE.
Twice-told Tales, NATHANIEL HAWTHORNE.

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BRIGHT YOUNG PEOPLE

Off the Skelligs, JEAN INGELOW.
A Jolly Fellowship, FRANK R. STOCKTON.

GIRL LIFE

An Old-Fashioned Girl, LOUISA M. ALCOTT.
Little Women, LOUISA M. ALCOTT.
The Biography of a Prairie Girl, ELEANOR GATES.
The Doctor's Daughter, REBECCA SOPHIA CLARKE.
A Summer in Leslie Goldthwaite's Life, ADELINE D. T. WHITNEY.
Real Folks, ADELINE D. T. WHITNEY.
Square Pegs, ADELINE D. T. WHITNEY.

BOY LIFE

Tom Brown's School Days, THOMAS HUGHES.
Against Heavy Odds, HJALMAR H. BOYESSEN.
Modern Vikings, HJALMAR H. BOYESSEN.
Boyhood in Norway, HJALMAR H. BOYESSEN.
Two Little Savages, ERNEST THOMPSON-SETON.
Being a Boy, CHARLES DUDLEY WARNER.
Boys of Other Countries, BAYARD TAYLOR.
Indian Boyhood, CHARLES A. EASTMAN.
Phaeton Rogers, ROSSITER JOHNSON.
Dab Kinzer: The Story of a Growing Boy, WILLIAM OSBORN STODDARD.

A collection of interesting books in the first year, the list increases in literary and critical value to the fourth year, presupposing on the part of the student a proportionate increase in appreciation of style and spirit.

PEOPLE WORTH KNOWING

Life of Alfred Tennyson, HALLAM TENNYSON.
Letters and Memorials of Jane Welsh Carlyle.
Reminiscences, THOMAS CARLYLE.
Praeterita, JOHN RUSKIN.
Anne Gilchrist, Her Life and Writings, Edited by H. H. GILCHRIST.
Autobiography of Harriet Martineau.
Letters of Celia Thaxter.
Life and Letters of George Eliot.
Life of William Morris, JOHN WILLIAM MACKAIL.
Vailima Letters, ROBERT LOUIS STEVENSON.
Life of Alice Freeman Palmer, G. H. PALMER.
The Gentlest Art, EDWARD VERRALL LUCAS.
Book of the Sonnet, LEIGH HUNT.

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Heroes and Hero Worship, THOMAS CARLYLE.
Virginibus Puerisque, ROBERT LOUIS STEVENSON.
The Life of the Spirit in the Modern English Poets, VIDA D. SCUDDER.
English Composition, BARRETT WENDELL.

By comparing this list with the required English work of secondary schools, it will be seen that the selection is by no means confined to collateral reading, and that no attempt is made to keep the student to one period or one form of literature. For example, in the first half-year high-school pupils study Hawthorne's *Tanglewood Tales* and Bryant's *Translation of the Odyssey*. The list of eighty-five titles includes only three stories and ten descriptive works on the mythology, folklore, and customs of the Greeks, and ten poems embodying Greek myths.

"The mark of high-school teaching is uniformity; the mark of genius is difference. The slogan of high-school teaching is drill, repetition. The essential of literary enjoyment is surprise, novelty, movement. The natural stimulus of good reading is in its creation of a desire to read the book through. The scholar's method is to hold you to the book so long that you are sick and tired of it." So said Principal McAndrew in a recent address. There is no doubt that the present intensive laboratory method of teaching English, perhaps necessary with classes and curriculum overcrowded, does not make even Greek literature the source of joy it should be to the average young person. If all reading is confined to one subject, and no other and lighter reading suggested, books grow distasteful by very insistence, thereby defeating the probable purpose of the study of literature. Reading from choice from such an inclusive list allows the pupil to follow his own bent, and so creates a prejudice for, instead of against, the book.

Having read and enjoyed these books, the pupil can, and often does, read something better. Certainly the reading of six pieces of genuine literature every year for four years—and we can expect little more from the growing boys and girls of this busy world—ought consciously or unconsciously to give such a reader a basis for judgment and comparison. Teachers who have used this list believe that it does one other and better thing; it creates a positive distaste for poor and vulgar forms of writing.

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THE EIGHTEENTH MICHIGAN CLASSICAL CONFERENCE

FRANCIS W. KELSEY
The University of Michigan

The Eighteenth Michigan Classical Conference was held in Ann Arbor March 26, 27, 28, and 29, 1912, in connection with the annual meeting of the Michigan Schoolmasters' Club. The joint session of Tuesday evening was held in the Auditorium of the Ann Arbor High School; the other sessions, in the Memorial Building of the University of Michigan.

A brief business meeting was held at 4 o'clock on Thursday afternoon. It was voted to formulate the working plan of the conferences, so as to define more clearly the duties of the officers, and a committee of three was raised with instructions to report at the next Conference.

At the close of Professor D'Ooge's address on Friday afternoon Professor George A. Williams, of Kalamazoo College, presented the following resolution:

WHEREAS, Professor M. L. D'Ooge has tendered his resignation of the chair of the Greek language and literature in the University of Michigan, to take effect at the close of this academic year:

We, members of the Classical Conference, desire to express to him our high appreciation of the great value of the fifty years of service which as teacher in school and university he has made memorable by his inspiring instruction, and of the large contribution which he has made to classical learning by his successful labors as Director of the American School at Athens, by his skilful editing of Greek masterpieces, by his learned work in *The Acropolis*, and by his numerous addresses on classical themes; and we beg to assure him of our sincere wishes for his happiness in the years of leisure now awaiting him.

The resolution was seconded by Professor J. T. Ewing, of Alma College, and others, and was passed by a rising vote. Professor D'Ooge responded briefly; an engrossed copy of the resolution was afterward prepared and delivered to him.

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The program follows, with references and abstracts.[1]

PROGRAM

Tuesday Evening, March 26

Joint Session of the Classical Conference and the Ann Arbor Art Association.

Presiding Officer

THEODORE W. KOCH, University of Michigan
President of the Ann Arbor Art Association

1. Lecture: The Excavations and Discoveries at Cyrene in 1910–11.
F. W. KELSEY.

By way of introduction the ancient sources for the history of Cyrene were indicated; its political and commercial importance, and the discoveries before 1910, were briefly characterized.

The excavation of Cyrene was first proposed by Professor Charles Eliot Norton, the founder of the Archaeological Institute of America, but many years elapsed before conditions were sufficiently favorable to warrant the undertaking. In December, 1909, the Council of the Institute authorized the taking of the preliminary steps. In May, 1910, an iradé was granted by the Turkish government, and Richard Norton was requested to make a more careful inspection of the site than had been possible in previous reconnaissances; an account of this journey was published, with illustrations, in the *Bulletin of the Archaeological Institute of America* (II, 57–67) under the title: "From Bengazi to Cyrene."

In order to defray the cost of the work in the earlier stages the sum of fifteen thousand dollars a year for three years was made available in subscriptions and pledges. The direction of the undertaking was placed in the hands of a Commission of the Archaeological Institute consisting of Allison V. Armour, of New York; Arthur Fairbanks, of the Museum of Fine Arts, Boston; and D. G. Hogarth, of the Ashmolean Museum, Oxford.

The staff organized for the excavation consisted of Herbert Fletcher De Cou, Joseph Clark Hoppin, Charles Densmore Curtis, and Lawrence Mott, Americans, and Dr. Arthur F. Sladden, an Englishman, with Richard Norton as director in charge of the operations. In October, 1910, Mr. Armour conveyed the party in his yacht to the landing-place nearest the site, and also transported the supplies. The many difficulties incident to commencing work of the kind in an inhospitable country were met, and overcome.

Of especial value in establishing friendly relations with the natives were the skill and generous help afforded by Dr. Sladden, who had a "consulting room" and surgery first in a tent, later in a large and well-lighted ancient tomb; in seven months he treated 721 cases, recording 1,229 visits of the natives.

The work of excavation continued, with interruptions, from the end of October, 1910, to April, 1911. On March 11 Mr. De Cou was shot and instantly killed by

[1] Commencing with the Classical Conference of 1913 a series of addresses will be given upon the relations of the modern subjects to the ancient. The first address, on "The Paradox of Oxford" will be given by Mr. Paul E. More, editor of *The Nation*, on the evening of April 4, in University Hall, Ann Arbor.

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Arabs "who had never had any relations or dealing whatever" with any member of the expedition; "they did not belong to the neighborhood, but were hired and sent from more than fifty miles away to commit the murder." The time has not yet come for a final statement in regard to the motives which actuated the hiring of the assassins by utter strangers, who, there is reason to believe, desired to drive the excavators from the country by killing the director, but through a misunderstanding caused the death of Mr. De Cou instead.

The results of the excavation, considered as a first season's work, far exceeded expectations. Though the architectural remains unearthed are not without interest, of greatest importance are the sculptures; among these is a head of Athena of the best period of Greek sculpture, and a headless statue above life size resembling the Nike of Samothrace. Many minor objects were discovered, including some three thousand complete, or nearly complete, votive figurines, and a number of inscriptions. The inscriptions are soon to be published in the *American Journal of Archaeology;* the finds are briefly treated, with illustrations, in the *Bulletin of the Archaeological Institute* (II, 141–67, plates XLVII–LXXXI; Dr. Sladden's Report on the medical work follows, pp. 168–76).

The campaign of 1911–12 was fully planned and the excavators were on their way to the site when they were stopped at Malta by the breaking out of the war between Italy and Turkey; unfortunately it has not yet become possible to resume operations.

Wednesday Afternoon, March 27

Presiding Officer

PROFESSOR GEORGE A. WILLIAMS, Kalamazoo College

2. Some Roman Ruins in Tunisia.[1]

PROFESSOR JOHN G. WINTER, University of Michigan.

Published, with 11 illustrations, in *Records of the Past*, XI (1912), 111–24.

3. High School Latin from the Point of View of the Second-Year Pupil.

MISS EVA P. CARNES, South Haven High School.

Published in *Journal of the Michigan Schoolmasters' Club*, Forty-seventh Meeting (1912), 35–41.

4. A Method in Second-Year Latin.

MISS HELEN B. MUIR, Ypsilanti State Normal College.

Journal of the Michigan Schoolmasters' Club, Forty-seventh Meeting (1912), 41–48.

5. Discussion of Papers 3 and 4.

MISS ALICE PORTER, Ann Arbor High School.

Miss Porter's remarks were followed by a spirited and fruitful general discussion, which was resumed on Thursday afternoon after the paper by Miss Allison (p. 197). It was decided to continue the discussions at the Conference of 1913; a committee was appointed to arrange the topics and secure speakers.

[1] Illustrated with the stereopticon.

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6. The Views of Quintilian on the Causes of the Corruption of Oratory.
PROFESSOR WILBER J. GREER, Hope College.

The fact that Quintilian's views were in any degree determined by the educational theories and conflicts of his own and preceding times has been largely overlooked—a fact which makes all the more striking the claim of von Arnim (*Dio von Prusa*, pp. 91 ff., 134, etc.) that Quintilian was a champion of the practical education advocated by the neo-Sophists. The paper upheld von Arnim's view and endeavored to show that Quintilian's explanations of the causes of the corruption of oratory in his day proceeded from this point of view.

As a schoolmaster Quintilian believed that the decline of oratory was due to faulty methods of education. In the time of Cicero and the so-called *veteres* oratory was sound. At that time it was made to serve the purely practical end of victory in the law court or in the assembly. Its watchword was *utilitas*. After Cicero's time declamation came increasingly into vogue, an exercise which Quintilian regarded as originally meant to train for speaking in real contests in the forum.

But the origin and purpose of declamation were soon forgotten and the ignorance of teachers regarding its origin, and the licenses they took in changing its character, became the chief causes of the corruption of oratory. It was no longer a "practical" exercise, but a vain elocutionary display, unfitting one for real contests in the forum; the new watchword was *ostentatio*. Of this Quintilian disapproved, as Cicero and all those under strong Sophistic influence would have done under like conditions.

7. Some Instances of Blood-Rain in Mediaeval Records.
PROFESSOR JOHN S. P. TATLOCK, University of Michigan.

To be published.

8. Light on New Testament Problems from a Manuscript of the Gospels in the Freer Collection.[1]
PROFESSOR H. A. SANDERS, University of Michigan.

This paper presented in concise form several conclusions which are more fully stated, with the evidence supporting them, in *University of Michigan Studies*, "Humanistic Series," Vol. IX, Part I (1912).

Thursday Afternoon, March 28

Presiding Officer
PROFESSOR B. L. D'OOGE, State Normal College

9. The University Collection of Inscriptions Recently Mounted on the Walls of the Stairways of the Memorial Building.[1]
F. W. KELSEY.

The epigraphic collections of the University of Michigan fall into two classes, originals and reproductions.

Under reproductions are comprised squeezes, rubs, and photographs of inscriptions at Pompeii, in the Vatican, Capitoline, and Terme Collections in Rome, and in the Naples Museum. These are now assembled in the Memorial Building and in the near future will be made available for study.

[1] Illustrated with the stereopticon.

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The original inscriptions comprise tablets and a few other inscribed objects of marble, three painted inscriptions (one Etruscan) upon cinerary urns, a mosaic, and eleven pieces of lead pipe inscribed with raised letters. There is also a collection of brick stamps from Rome, which (including incomplete as well as complete examples) represent more than 250 types, the number of specimens being above 400. They were treated in two papers, by Mr. H. M. Gelston and Mr. I. B. Hunter, at the Classical Conference of 1905.

The tablets mounted on the walls of the stairways in the Memorial Building number 360; of these 345 are Latin, 15 Greek. The greater part formed the collection of Giuseppe de Criscio, parish priest of Pozzuoli, who for half a century pursued with ardor the study of the antiquities of the region. One hundred and forty-eight of the De Criscio inscriptions were published in the tenth volume of the *Corpus Inscriptionum Latinarum*, others in the eighth volume of the *Ephemeris Epigraphica*, and others still in the *American Journal of Archaeology* for 1898; a few are yet unpublished. While the majority of the inscriptions are sepulchral, other classes are represented. Of especial interest is a dedication to the Emperor Augustus set up in his lifetime; there are a number of tablets commemorating the lives and service of officers and marines of the imperial fleet stationed at Misenum, and preserving the names of galleys.

Of the tablets from Rome, now mounted with the others, an account was given at the Conference of 1911 (*School Review*, XX, 177).

All the inscriptions were the gift of friends of the University; Professor Walter Dennison conducted the negotiations for their purchase and arranged the exportation from Italy. A volume on the inscriptions, by Professor Dennison, is in preparation.

10. Bridging Bryce's Twenty Years.

Miss Genevieve Duffy, Detroit Central High School.

The reference in the title of this paper is to the following passage in a Phi Beta Kappa address given by Hon. James Bryce in Ann Arbor, April 4, 1911:

"It is much to be regretted that the number of men who are studying Latin is becoming small, and the number of those studying Greek, infinitesimal. I venture to predict, however, that if the universities can safely pass the danger period that is threatening us now, in twenty or thirty years there will be a great reaction in the attitude toward these ancient literatures. The pressure of intense competition in business will diminish in the next generation; the great corporations will have largely completed their exploitation of natural resources; gainful occupations will relatively decrease in importance; the ideals of men will return to those subjects in which the ancient literatures contribute to make life rich and enjoyable, and the study of the classics will revive."

The speaker urged, as a means of safeguarding Latin in the immediate future, a more skilful adjustment of the course of study to the mental development and needs of the student, particularly in the earlier years; in particular, the speaker maintained that Caesar is not well adapted for the first Latin reading of pupils who have had only one year of Latin.

11. Possibilites.

Miss Maude Parsons, Kalamazoo State Normal School.

"In the first place, are all teachers of the classics as enthusiastic as they should be, and has not the lukewarm attitude of some done as much harm to the cause as the

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arguments of opponents? For my part, I have no sympathy with any teacher who is a pessimist, particularly a teacher of the classics. Unfortunately there are some who though outwardly enthusiastic are always complaining in private of the present state of affairs. They seem to be doing nothing, however, to improve the situation.

"In preparing this paper, I asked thirty or more teachers of other branches and a number outside of the teaching profession if they would take less Latin and Greek were it in their power to choose again in their high-school and college courses; with the exception of one, all said that they certainly would not take less, and several said they would devote more time to the classics. When we find so many parents and teachers of this opinion why is it that so many now-a-days do not take up Latin at all, and so many lose interest after the first year, so that few in comparison with the number who commenced Latin complete a four years' course? Although the blame is variously placed, I believe it belongs many times to the teacher. Are we doing all that is possible for us to do in promoting and advancing our work?

"Altogether too much fuss, it seems to me, is made over the work of the second year; if less talking were done and more of something else to make that year attractive, I fail to see why it should not be as agreeable as any year. It seems to me to present very great possibilities.

"Professor B. L. D'Ooge's *Beginning Latin Book*, which I have been using the past year, has a short dedication, which impressed me: 'This little work has been dedicated to my small son who has taught me many things which ought to be said and many which should be left unsaid.' In these few words in my judgment lies the keynote of the success of a good teacher.

"There is no department in the high school that needs good illustrative material so much as the Latin department. The Latin room ought to be equipped with good pictures of classical subjects, good reference books, charts and maps; the pupils should be taught how to use them, and encouraged to do so, being shown the advantage of such knowledge in connection with their other work.

"A small bulletin board in the corner of the room, preferably near the door where the pupils pass in and out, has been found in our school an excellent place for clippings of interest or references to magazine articles, for example concerning the Olympic games, excavations around Rome, Ostia, Herculaneum, and Crete and other subjects too numerous to mention. The student should be made to realize the close connection between the ancient times about which he is studying, and the present.

"During the past year, a Classical Club in our school has proved interesting and instructive not only to the members of the Latin classes but to some others who were admitted to membership because they were interested in the work we were doing. We have had two meetings a month, in one of which a literary program of classical subjects was presented, in the other we have devoted our time to the study of the private life of the Greeks and Romans. This meeting has been of a social nature. We have played Roman games, and a mythological game, and learned some Latin songs. Several times some of the students have contrived simple costumes and sometimes we have had simple Roman refreshments, such as coarse brown bread, milk, and honey.

"The spirit of play has so taken possession of the work in the grades, and domestic science and art are taught in a fashion so different from that which has prevailed or can prevail in Latin classes, that (in the language of the vernacular) 'it is up to us' who are teaching this subject not only actually to teach Latin but to make it so attractive that the pupil will find it as full of life as any other subject. But please

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do not think that I believe that Latin can be learned without hard work in this generation any more than in the preceding ones. The times have changed and we must use tact in meeting their requirements.

"To illustrate work in class, boys mechanically inclined have at different times made engines of war, and one time an excellent 'Caesar's bridge' was made. The boys would gather around it, out of class, and examine and discuss every part of it; it goes without saying that they could translate the passage better in consequence. As a rule boys who take much work in manual training are not found in the Latin classes, but occasionally one does stray in and he can be very helpful and ought to be encouraged along that line.

"Many times, in answer to inquiries made concerning the scholarship of pupils about to graduate it has been my pleasure to note that the honor pupils were those who had had four years of Latin; almost invariably I have found that those who did the best work for me in Virgil were the best in English literature. I feel like congratulating myself that even if the Latin classes are smaller than they should be, after the first two years at least, as a rule I am dealing with the best students in the whole school.

"The possibilities rest largely with the teacher. Judging from the teachers of the classics with whom it has been my good fortune to be associated, I am bound to believe that they will be increasingly realized."

12. Latin for the Average High-School Student.

MISS ELIZABETH L. WILCOX, Jackson High School.

Journal of the Michigan Schoolmasters' Club, Forty-seventh Meeting, pp. 48–51.

13. Discussions of the Papers Numbered 10–12.

MISS CLARA J. ALLISON, Hastings High School.

We have listened to a threefold discussion of our subject. The first paper afforded a general survey of the field of secondary Latin; the second discusses the teacher's duty in this field, while the third directs attention to the changed conditions which both teacher and pupil of today must meet. Miss Wilcox has laid especial emphasis upon the fact that our work is neither with the trivial nor with the insignificant, but with that which is fundamental in all things educational; and this is a conviction necessary before we can meet Miss Parsons' requirement of being "teachers who will vitalize our subject."

We are in the midst of an era of democracy in education as elsewhere; our classes are no longer filled with an intellectual aristocracy, but with pupils of all sorts and conditions, and we owe them the privilege of being trained for citizenship in that state of living which has hitherto been the prerogative of the favored few. To every pupil, however unpromising, who enters our classes we must afford the means of attaining whatever benefits are to be received from the study of Latin. When these pupils fail, dulness is not the cause; rather they are not fitted by inheritance of previous training with the little direction they receive, to do the exacting work demanded by Latin.

The remedy therefore lies not so much in changing present requirements as in seeing that pupils are so directed that they can pass the first two years with some feeling of achievement. We are not so much in need of new subject-matter, nor yet of a lesser amount, as we are of additional periods in the first year, during which the class working with the teacher may learn to conserve their efforts, studying sentences clause by clause, coming to recognize the importance of connectives and verbs in

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revealing the thought, rather than groping about in what to them is a confused jumble of words and forms, wasting time in mere stringing together of words at random.

Efficiency is the slogan of today. Decide in your own minds whether in the Latin class you can best gain this through a change from our present subject-matter or, if you have your choice, by careful personal supervision of your pupils' study as well as their recitation. The plan is feasible and has been tried out in one school. In that school one additional class period per day (all beginners being required to keep this hour free for the work in Latin) has served for two classes of beginners, and the results from an economical viewpoint have been such as to justify, in the eyes of the administration, the arrangement of the extra hour.

14. The Statue Lately Discovered on the Site of Antium.[1]
PROFESSOR HERBERT RICHARD CROSS, University of Michigan.

The speaker presented a number of slides showing the nearest parallels to the type of the so-called Fanciulla d'Anzio, interpreting the statue as a work of the early Hellenistic period. The question whether the statue represents a youth or a maiden was not decided, although the evidence brought forward seemed to sustain the view that a youthful priestess is represented.

Friday Afternoon, March 29

Presiding Officer

PRESIDENT EMERITUS JAMES B. ANGELL, University of Michigan

15. The Crane, the Classics, and the Boy.
PROFESSOR E. D. DIMNENT, Hope College.

16. The Classical Club in College Work.
PROFESSOR JOHN T. EWING, Alma College.

Three important aims of the college course in the classics are the attainment of reading power, the acquisition of knowledge of ancient life, and the appreciation of the quality of that life as an influence for culture. There are three difficulties in the way of the attainment of these aims, namely, the limited time in recitation, the formality of recitation, the limitation of independent work. It is proposed to devote the recitation periods in the main to the development of reading power and to utilize the "classical club" in realizing the other aims of classical instruction. As reasons for this suggestion it is maintained that the club would encourage independent work, that its freedom would be stimulating, and illustrative material could be more conveniently used. In the conducting of such an organization it is suggested, first, that student members be put in charge of its affairs with the exception of the preparation of the programs; second, that the programs be so arranged as either to supplement the work of the classroom, or to touch matters entirely outside of its scope; third, that variety should be sought through the preparation of special programs; fourth, that extended courses in the history of art, private life, etc., may be pursued, if preferred; fifth, that recognition should be made of work of satisfactory quality, preferably in honor points.

[1]Illustrated with the stereopticon.

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17. The *Ligue pour la culture française.*

PROFESSOR J. R. EFFINGER, University of Michigan.

The *Ligue pour la culture française* is an organization formed in France to defend humanistic, particularly classical, studies against the assaults of philistinism. Professor Effinger's paper is published in full in the *School Review*, XX, 401–6.

18. The Humanizing of the Latin Teacher.

MISS FRANCES J. BROWN, Port Huron High School.

Published in *The Classical Journal*, VIII, 109–14, and *Journal of the Michigan Schoolmasters' Club*, Forty-seventh Meeting (1912), pp. 51–56.

19. The Teaching of Virgil in Relation to the Development of the Appreciation of Literature.

PROFESSOR F. C. DEMOREST, Albion College.

The appreciation of Virgil's *Aeneid* is the capstone, and the human development of the pupil which comes from its appreciation is the goal, of the Latin teaching of the high-school course. Such a goal will have an enlightening and humanizing effect on all the earlier studies of the Latin course. Then, too, something of the Greek spirit must be infused into the Latin study, even as it was infused into Latin life and literature.

The appreciation of meaning is the thing of vital importance; meaning of word, of phrase, sentence, paragraph, or reference, as it appeared to the intellect of the Roman. This will materially aid in the mastery of forms even, for that which fills the form fixes the form in the memory. To this end the teacher must be a vitalizing embodiment of the Roman spirit. The age at which the pupil begins the study of Latin is favorable to this emphasis. It is the age of transition from unthinking imitation to thoughtful consideration and comparison of differences, the age at which the pupil is hungry to meet conditions and know situations and things to which he has not been accustomed. The very beginning of Latin should be like a miniature Age of Pericles or Period of the Crusades in the variation from the usual in his experiences. The teacher of the beginning classes should be master of the life and spirit of the Romans as well as know the forms of the language, and should saturate all the work with the Roman spirit. It is a pity to have a beginning book make too much of an effort to use in its first lessons only those words which are transliterations of English words, such as "rosa," "longa," "oceanus," "servus," etc., or words whose meanings are very easily perceived from allied English words, and thus lose the sense of newness and the stimulus to consideration of differences of meanings. It is a mistake to allow the pupil to get the impression that the Latin language is simply a different terminology and phraseology for the very same concepts with which he has been familiar in his immediate environment. Here, too, is the secret of the difficulty so frequent in mastering the vocabulary of the Latin. No Latin word means exactly the same as the so-called English equivalent. If the pupil shall be led by a teacher well acquainted with the civilization of Rome to appreciate the differences in the meanings he will no longer be trying to remember two words for the same thing. He will have a newness of meaning with which to hold the new word. He will attach the word directly to the meaning rather than to an English word, and this meaning will weld the word to the memory as no English word could. This kind of thing leads to the appreciation of meaning

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that is the touchstone of all literature. All is to be appreciated as a mold of life experience. Herein, I think, is the fundamental defect of our Latin teaching as a whole.

The human condition of the adolescent with the widening and deepening appreciation of nature and of things spiritual is ripe for the appreciation of such a poem as Virgil's *Aeneid*. No high priest of any age ever had greater function or better opportunity. Now, if ever, is the time for initiation of the youth into sympathetic appreciation of deep-souled literature—into the highest and deepest meanings of life.

Here is need of a teacher with vision, for "where there is no vision" the pupils perish. Here the pupil is expected to give attention to material which seems at first sight to contradict all previous training. Heretofore he has been putting away childish things. Now he has come to a place where "except he become as a little child he cannot enter the kingdom." It is well for the teacher to refresh and saturate himself with the inspiration that one gets from re-reading the great poets of Nature. Everything depends on freshness, eagerness, sympathetic insight. Read Wordsworth, Shelley's "Defense of Poetry," Caryle's "The Hero as Divinity." As the pupil reads

"Iudicium Paridis spretaeque iniuria formae,"

let him read or have read to him appreciatively Tennyson's "Aenone." The pupil is easily led to see that this is not an idle dream, but that it is packed with meaning, fresh and modern as well as ancient; that this old tale of the Trojan war tells the central truth about his own life and indeed about all lives. This insight comes to the young pupil with searching suggestiveness, and puts a freshness of interest into the whole subject which he had not anticipated. It is easy to suggest forthwith that Virgil intends his hero Aeneas to be the exact antithesis of Paris in the choice he makes. From this viewpoint Aeneas instead of being the least interesting of the characters of the *Aeneid* bids well to become the most interesting of all. The problems of his character at once present themselves, and the pupil becomes conscious of the fact that in studying the *Aeneid* he is in some sense all the while studying himself. The pupil will feel a vital kinship with that far different time and country, the great unities of human existence. This enlarging of the self, this expansion of the sympathies, is the fundamental essential to the appreciation of literature. And this kind of appreciation of the *Aeneid* as literature is at the same time the appreciation of life. It is the kind of thing to be sought in the secondary-school course of Latin.

20. Address: Greek Study in Retrospect and Prospect
PROFESSOR M. L. D'OOGE, University of Michigan.

Anniversary address, marking the completion of fifty years devoted to the teaching of Greek; published in full in the *Classical Journal*, VIII (1912), 49–59.

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EDUCATIONAL NEWS AND EDITORIAL COMMENT

NEW YORK SCHOOL INQUIRY

The New York school inquiry has continued to attract attention during the month. Preliminary reports have been put into the hands of the New York newspapers, and widespread comment has been heard on the various recommendations of the Committee of Inquiry. Professor Hanus was good enough to supply the *Review* with the following summary which constitutes the closing paragraphs of his general summary of the report:

It is clear that in spite of the progress the public-school system of New York City has made since the consolidation, it is seriously defective. It needs thorough reorganization in respect to its administration by the Board of Education and the supervisory staff; and in respect to its general system of supervision. The Board of Education needs a clear conception of its functions, and should come to close quarters with its work. The Board of Superintendents fulfils no useful function and should be abolished. In the general system of supervision, helpful co-operation under leadership should replace bureaucratic control. The Board of Examiners is decidedly efficient, but needs reorganization to improve and maintain its efficiency. The courses of study for elementary schools and for high schools need thoroughgoing revision, and flexibility should replace rigidity in their administration. The quality of the teaching in the elementary schools, at least, is in general not good, though sometimes good to excellent. The provisions for the discovery, segregation, and appropriate treatment of mentally defective children are quite inadequate, and need immediate attention. The compulsory attendance service is inefficient; it emphasizes police functions rather than preventive measures, and the staff greatly needs reorganization on a functional basis. The recognized advantages of intermediate schools in relieving congestion have not led to the further establishment of such schools, and no attempt has been made to realize the exceptional educational opportunities these schools afford; promotions and nonpromotions are not studied so as to yield a real basis for a maximum rate of promotion; part time classes should be abolished; the estimated need of teachers for elementary schools and for high schools is not based on indisputable and well-organized data. The provision for industrial education is so meager as to be almost negligible; neither industrial nor commercial education is so maintained as to secure the necessary effective co-operation of industry and commerce, and co-operative and continuation schools are wholly absent. Habitual self-scrutiny and an appeal to well-

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conducted investigations and experiments to secure the necessary data to confirm or refute educational opinion and furnish the regulative for all the activities of the school system and for its adequate financial support are lacking.

THE STANDARDIZING OF SOUTHERN HIGH SCHOOLS

The standardizing of secondary schools in the southern states has been undertaken by a commission appointed by the Association of Colleges and Secondary Schools of the Southern States. At the meeting of this Association in 1911, a list of requirements was adopted and the committees for inspecting high schools were created. The first list will be made out in 1913, when the commission will hold a meeting at Richmond, Va. The blanks which are to be used for the collection of information have been drawn up in such a way that they are in a large degree uniform with the blanks of the North Central Association. A division of territory has also been worked out, so that there will be no duplication of effort between the North Central Association and the Southern Association.

In one respect the Southern Association has gone farther than the older association with which it is co-operating. A blank has been prepared upon which colleges will report in February of each year to the commission in each state the standing of all students entering from the high schools in that state. In this way an objective measure of the efficiency of the certificating system will be established. The development of this objective system of measurements will undoubtedly overcome some of the objections which have been made to the certification system as it is used in the northern states. Indeed a well-formulated movement is under way in the North Central Association to collect, in a large way, information of this type as a supplement to the information which is collected through personal inspection. It is only through some such supplementing of personal inspection that the certification system can ever be made to stand against the objections which are offered to it by those who, in the eastern part of the country, have been accustomed to require examination for the admission of students to college.

REPORT OF INSPECTOR OF HIGH SCHOOLS IN SOUTH CAROLINA

A report by the High School Inspector of the University of South Carolina furnishes an interesting view of the struggle which is going on in the South to develop high schools and Colleges.

After giving statistics for the state, the inspector discusses, in a

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number of paragraphs, the details of the present high-school situation. These paragraphs point out by name the high schools which are deficient in particular directions. For example, the inspector calls attention to the fact that "a radical weakness in our high schools is the small amount of science teaching and the inferior quality of what is done." He then mentions various schools in which science courses are not given, and furnishes in this way a definite stimulus to each one of these schools to improve. This pointed criticism of particular schools would hardly be justified if it were not for the fact that the inspector knows that this is the only method which he can employ to bring about the improvement of conditions.

He then proceeds to ask and answer the question, "Who is responsible for these conditions, and what are the remedies?" A few quotations from his paragraphs will show the vigor with which he has attacked the problem. "Nothing is more self-evident than that the people of the state are not putting a just estimate upon the value of first-class high schools, by which is meant schools of at least four years, with a range of subject large enough to meet the needs of all pupils, with enough teachers to handle the classes, and with enough apparatus to do effective work." In order to show the lack of appreciation on the part of communities case after case is cited in which it is shown that "more than one-half of the high-school communities in the state are impoverishing their high schools by taking their sons and daughters away and sending them to college at a heavier expense than that of the entire high school at home." And this is done even before the pupils have finished the regular high-school course. The inspector then gives a number of cases which go to show that the colleges have accepted these high-school students, and have evidently been carrying on, under the name of college, work that is essentially secondary in character. The following remarkable statement calls attention to the attitude which the colleges assumed in the past: "No longer than six years ago almost every college in the state had in its Freshman class numbers of pupils from the second year in the high school. Colleges canvassed for second-year high-school pupils. So well known was all this that the high schools had difficulty in keeping their college preparatory pupils through the third year. Taking pupils from the second-year high school is yet practiced in some of the colleges, but with most of them it has come to be the exception instead of the rule. In so far as the colleges have advanced from a basis of two years of preparation to that of three years, just to that extent have the colleges contributed to the growth of the high schools."

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Other interesting information is furnished by this report. Certainly a vigorous attack of this sort upon the problem of secondary education in the South is sure to result in improvement. The report commends itself for the clear-cut definiteness with which the inspector has pointed out the lines where improvements are necessary, and the agencies which must take up the problem of the development of the high school with greater vigor.

HIGHER EDUCATION IN NORTH DAKOTA

On a number of occasions the *Review* has reported the efforts of state institutions of higher education to work out a scheme which shall prevent duplication and concentrate facilities. A report along these lines has just been issued by the "Temporary Educational Commission of the State of North Dakota." This commission was created in 1911; it has been canvassing for two years the relation between the higher institutions in North Dakota, and now renders a report, with the request that the commission be continued for further investigation during the next two years.

This report differs in its findings from most of the reports which have been rendered under similar circumstances. The commission lays down two general principles for the development of the educational system of the state. The first is the principle of the co-ordination of the various institutions involved, and the second is the principle of freedom of government. "Co-ordination implies the existence of a definite place for each institution in the work of state education, and that there is a limited duplication in the relation of the institutions to each other." The principle of freedom of government is interpreted to mean that each one of the institutions of higher learning ought to have its own system of officers who are especially charged with the particular function of that special institution. The recommendation of the commission is formulated as follows: "Recognizing the principle of one board for one type of institution, the university should continue under a board as at present, the agricultural college under another board, the normal schools under a third, and the industrial schools under a fourth."

It may be said that this commission has been very largely influenced in its conclusions by an elaborate statement prepared by Mr. Babcock of the Bureau of Education of the United States, at Washington. Mr. Babcock outlines at great length the relations of the various types of institutions, and his position seems to have influenced the commission to a very great extent.

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A CONFERENCE OF TEACHERS OF EDUCATION

A report has been received from Mr. Charles Mills of a conference of Professors of Education of the Middle West Universities and Colleges, held in Lincoln, Nebraska, during the last week of December. Twenty-five representatives were present from the schools of eight different states. The following program was followed:

"Does the Present Undergraduate Course in Education Accomplish Its Purpose in Training Teachers?" by Professor W. A. Jessup, University of Iowa.

"A College Graduate Teachers' Certificate Valid throughout the Middle West," by Professor J. O. Craeger, University of Wyoming.

"The Vitality of Teaching," by Professor W. M. Jones, University of South Dakota.

"What Has Been Done Along These Lines Up-to-Date," by Professor B. E. McProud, Nebraska Wesleyan University.

"School Observation; what it should seek to accomplish; how to administer it," by Professor Frank E. Thompson, University of Colorado.

"Aim of Practice Teaching, and what it is accomplishing," by Professor Charles Fordyce, University of Nebraska.

"Practice Teaching; its administration in the University," by Professor J. L. Meriam, University of Missouri.

It will not be possible to present a full summary of all of the papers. Two of the discussions of the meeting are, however, of such general importance that a brief reference may be made to them. The first dealt with the problem suggested by Professor Craeger's paper, "Is it possible to secure a college graduate teachers' certificate valid throughout a number of different states?" In the second place, a special problem, which was suggested by Professor Jessup, may be mentioned. Professor Jessup inquired whether the customary course in the history of education aids the teacher in schoolroom work. How far should practice teaching be required of the prospective high-school teacher? And how can the university department of education arrange to administer practice teaching?

The gathering gave an opportunity to inspect the work of the Department of Education at the University of Nebraska. The success of the meeting is evidenced by the fact that arrangements were made for another meeting to be held in December, 1913, at Omaha, Nebraska, under the chairmanship of Professor Charles Fordyce of the University of Nebraska.

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STATEMENT BY DEAN JOHNSTON

The following communication from Dean Charles H. Johnston, of the University of Kansas, is inserted at his request.

Under the heading of National Institution for Moral Instruction, Mr. Milton Fairchild publishes a large advertising folder. This contains reading-matter relating to his lecture, to his lantern slides, and to other matters, together with some indorsements from educators and other men, of his *Visual Instruction in Morals*. My own name and that of the School of Education of the University of Kansas have been printed and thus exploited in these large folders as representing an official and professional indorsement of the whole scheme of visual instruction in morals. In view of the fact that my name and that of the School of Education are being used despite my repeated and explicit declinations to express an opinion, I hope you will allow me this much of your space to correct a very misleading educational announcement.

GEOMETRY SYLLABUS

At the request of Professor H. E. Slaught, chairman of the committee on Geometry Syllabus, working under the joint auspices of the American Federation of Science and Mathematics Teachers and the National Education Association, the following announcement is inserted for the purpose of making it possible for all the mathematics teachers to secure this publication.

The report of the National Committee of Fifteen on Geometry Syllabus, which has been under consideration for nearly three years, and which was revised and finally adopted at the N.E.A. meeting in July, 1912, has now been republished in a pamphlet of 70 pages and is ready for distribution to the teachers of Geometry, and all others interested. This report was prepared under the joint auspices of the American Federation of Teachers of the Mathematical and Natural Sciences and the National Education Association. It includes a historical introduction and sections on axioms and definitions, on exercises and problems, and the syllabus itself including both plane and solid geometry. It is the hope of the committee that this report may be of great service to all teachers of geometry, and to this end that it may have a wide distribution among all interested. Copies may be secured gratis upon application to the Commissioner of Education, Department of the Interior, Washington, D.C.

PRINCETON ADMISSION EXAMINATIONS

Princeton has adopted a plan of admission examinations closely resembling the Harvard plan. The new Princeton arrangement is described as follows:

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Radical changes in the requirements for admission into Princeton University, by which the number of examinations which must be passed has been considerably reduced, have been announced in the new catalogue of the university which has just been published. The regular requirements have been altered in several respects and a new system has been adopted whereby students of more than average ability will be obliged, in the future, to take only a portion of the examinations originally stipulated for entrance.

The modifications of the regular requirements are intended to give the candidates for admission a larger freedom in the choice of subjects, this change being made especially with a view toward enabling the students in public high schools to adopt their preparation to the Princeton requirements. In respect to the total amounts required there are no alterations, the changes merely giving the student a broader choice of subjects.

An entirely new alternative method of admission to the Freshman class has also been adopted, under the provisions of which the student is forced to pass only four examinations instead of sixteen as formerly, provided he can produce statements from his preparatory school principal which will convince the university entrance committee that he has covered the sixteen subjects and stood above the average in his classes. This system has been adopted to meet the cases of the candidates who have decided late in their school courses to come to Princeton and who have not taken preliminary examinations. The method provides for general examinations in four major subjects—mathematics, Latin, English, and either Greek or modern language, in place of detailed examinations in several different branches of each of these studies.

WINDSOR INDUSTRIAL SCHOOL

The following item is clipped from the *Boston Transcript:*

Windsor, Conn., is to be the seat of a $2,000,000 vocational high school. Already the plans for the opening of this new institution are at hand; already the architects are competing for the privilege of supervising the erection of $300,000 worth of buildings. It is expected that the school to be called Loomis Institute will be ready for pupils in the fall of 1914.

The present plans of the trustees provide for a student body of about sixty at the start, which will insure accommodations for all the Windsor boys and girls who are likely at the outset to seek entrance to the school, and to provide at the same time for the considerable number of non-resident pupils who will be eligible to receive tuition there under the terms of the Loomis bequest. The fact is, perhaps, not generally understood, even in Windsor, that the founders contemplated the creation of a school which shall draw pupils from every part of the country, and that it is to be not only a Connecticut school, but a national school. The charter of the school says: "In case a greater number of persons having the requisite qualifications shall apply for admission than the institute can accommodate, then selection from

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said applicants shall be made, first from those belonging to the Loomis family by name or consanguinity, next from those belonging to the town of Windsor, next from those belonging to the state of Connecticut, and next from those deemed most worthy, without regard to state or nation."

Two of the stipulations of the Loomis Institute founders put constraints upon the trustees which educational experts in these days would not elect to assume. The school must provide instruction for young persons of both sexes, and no tuition fee can be received from any pupil. It must be a free coeducational school. The income is, fortunately, large enough to enable 200 or more students ultimately to receive training. The trustees are free to use as much or as little of the endowment for buildings as they please, and they are not compelled to spend all the income for carrying on the school until after all the buildings are completed. The trustees have determined to build only a portion of the contemplated structures before opening the school. Plans have been invited for a group of buildings which will include a main school and administration building, a number of dormitories, a residence for the head master of the school, and other necessary structures. It is proposed to provide the students with training which shall enable them not merely to earn a living, but to enter various walks of life with skill and efficiency. Girls will be taught more important things than stenography and typewriting. They will be educated in domestic science, and also trained for the work of matrons in public institutions, and even for the larger responsibilities of the business careers into which so many young women are now beginning to make their way. Boys will be taught to be good artisans, mechanics, clerks, and citizens.

The school will be called a vocational high school, but it is also planned to arrange the curriculum so that boys and girls may be fitted for college.

ENGLISH EDUCATIONAL ORGANIZATION

The similarity between the new English Municipal Education and the state systems which are familiar in America has been commented on in the *Review*. The following editorial copied from the *Philadelphia Inquirer* draws attention to the efforts which are being made in England to develop a complete system of popular education:

Soon after the British Liberal Party came into power, which was on December 5, 1905, a bill to reform the educational system of the country was introduced by the Bannerman Ministry. It was strongly opposed by the Conservatives in and out of Parliament. All the great influences controlled by the Church of England were arrayed against it and after it had been amended beyond recognition in the House of Lords the government let it drop. Since then no further effort to legislate upon this subject has been made. Other matters of greater urgency have engaged the attention of the administration,

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and the fact that it could not depend upon receiving the wholehearted support of the Irish Nationalists for any measure which involved the elimination of all religious teaching from the public schools helps to account for its inaction. According to a current report, however, its purposes in the premises have not been abandoned. We are told that Viscount Haldane and Mr. David Lloyd-George, whose energies seem untiring, have formulated a comprehensive scheme of educational reform which covers the whole ground from the primary school to the university.

Its avowed object is to provide a ladder up which any learner who is willing to work hard and whose mental endowment is equal to the occasion may climb from the ground to the top at the public expense. The scope of the instruction furnished by the primary schools is to be extended at both ends by beginning it earlier and continuing it later, and at the same time the curriculum is to be so broadened as to include much manual and technical teaching not now supplied. In the secondary schools these processes are to be further developed as capacity justifies and circumstances admit. There are to be subsidies and scholarships whereby the door of the university shall be opened to every boy and girl attaining to the prescribed standard of proficiency, and in order that there may be enough doors to accommodate the crowds which are expected to qualify themselves for admission, several such universities as those at Liverpool and Leeds are to be established and maintained. Thus there is to be created a symmetrically developed system whereby the great and manifold blessings of a university education are to be brought within the reach of all.

There is likely to be a wide difference of opinion as to the economic value of this ambitious project. Not everyone is convinced that a university education is worth to all its money cost. Some think that in a great many cases it does more harm than good because it involves a loss of time which can never be made up, and actually disqualifies the student for the kind of work in which he would be most usefully and profitably employed. For the young man who is intending to enter one of the learned professions, whose ranks are already so greatly overcrowded, a university education is highly desirable, if not positively necessary, but most young men can get along very well without it.

Apart from this consideration, however, there is the question of ways and means. It will necessitate a large appropriation to carry the Haldane-George program into effect, and the already overburdened taxpayers of the United Kingdom will want to know where the money is coming from. There is not much likelihood that this big educational program will be carried out at any early day.

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BOOK REVIEWS

Principles of Rural Economics. By THOMAS NIXON CARVER. Boston: Ginn & Co., 1911. Pp. xvii+386.

This book by Harvard's noted economist is one of the best contributions to secondary education in agriculture yet made. It furnishes a distinctly cultural element appropriate to the subject which has been lacking to a large degree. This characterization is made in no disparagement of the eminently practical application made of economic laws to the business affairs of the farmer himself.

The clear historical treatment of the relation of the farming class to the land in England from the time of the Conquest explains the origin of many present-day conventions. The exposition of the relation between cost of land and cost of labor should lead to clearer thinking about many proposals for curing present ills and a better discrimination between them. Descriptions are given of the introduction, often with great difficulty, of many reforms and innovations in agriculture. In short, the book is replete with accounts of how various conditions and operations of modern agriculture came to be and how their development has progressed in obedience to economic principles.

As the author says of the treatise, "it emphasizes the public and social aspects of the rural problem somewhat more, and the business aspect somewhat less, than do most treatises on this subject." Together with his ability as a keen thinker, Professor Carver brings to his task the familiarity with the subject gained by being reared on a farm and being himself later engaged independently in farming. No claim is made that the book is intended for the use of secondary-school pupils. Certain parts, notably the discussion of wages, rent, and single tax, in the chapter on the distribution of agricultural income, demand a mind of more maturity than is possessed by most high-school pupils. Just as high-school debating societies of two decades ago argued the question "Who pays the tariff?" so public questions will come up continually before the more active adolescent minds; to such, even the chapter referred to will be of great value. The work as a whole is probably as near the level of the capacity of the youths in high-school agriculture classes as the subject-matter permits, certainly as much so as is the material in those histories which rise above the mere narration of passing events.

The chapter headings are: i, "General Principles"; ii, "Historical Sketch of Modern Agriculture"; iii, "The Factors of Agricultural Production"; iv, "Management as a Factor in Agricultural Production"; v, "The Distribution of the Agricultural Income"; vi, "Problems of Rural Social Life."

The bibliography, placed in the front of the book by the way, is rather full,

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not even neglecting Cato and Columella, though one wonders at the choice of a government bulletin on the use of simple chemical demonstrations with home-made apparatus and of a few of the older elementary-school texts to the exclusion of later and more important general texts on agriculture.

The Improvement of Rural Schools. By ELLWOOD P. CUBBERLEY. Boston: Houghton Mifflin Co., 1912. Pp. x+76.

This little book presents a concise statement of the changed economic and social conditions of farming communities resulting in a decrease in the efficiency of the rural schools, together with suggestions as to the steps necessary to their betterment, centralization of authority, consolidation of schools, a changed attitude of patrons toward many obsolete and wasteful methods both financial and supervisory. The chapter headings are: i, "The Problem"; ii, "More Money"; iii, "Better Organization"; iv, "Better Supervision."

The small size of the book affords space for hardly more than a restatement of many widely discussed topics. The rather close analysis of chap. ii presents questions rarely touched upon in popular addresses or papers. This little work should help rural-school patrons and trustees wishing to analyze the local situations, if it could only reach them. The introduction by Professor Suzzallo, the editor of the "Riverside Educational Monographs," of which this book is one, is not the least valuable feature. The illustrations consist of four maps showing forms of school organization by states, tenure and methods of electing county superintendents, a proposed and an accomplished rearrangement of a county for school consolidation. The last two are from George W. Knorr's report on rural-school consolidation issued by the United States Department of Agriculture.

Agricultural Education in Public Schools. By BENJAMIN MARSHALL DAVIS, with an introduction by CHARLES HUBBARD JUDD. Chicago: The University of Chicago Press, 1912. Pp. vii+163.

The scope of Dr. Davis' work is much broader than is indicated by its title, for it really considers all the agencies of agricultural education even though they have little or no direct connection with school systems. It considers the educational work of the United States Department of Agriculture of the state organizations for agriculture, and of state farmers' institutes, and as well of agricultural societies. It treats of the work of such political institutions as the United States Bureau of Education and the state departments of education, and summarizes state legislation. A view is given of the direct bearing on the problem of the work of state normal schools and agricultural colleges, including their extension work, departments of agricultural education, and summer schools. Elementary and secondary schools are given less attention than the title of the book would lead one to expect, but the treatment is excellent and consistent with the general plan followed. Chapters are devoted to such professional activities and school accessories as the National Education Associa-

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tion, state and other teachers' organizations, boys' agricultural clubs, textbooks, educational periodicals, and periodical literature. The topics are not, however, taken up in the order given here.

It will be seen from the above that a comprehensive view is given of the various agencies devoted to educating the rural public. Each chapter gives a concise but good treatment of the historical development of the factor in question. Any investigation can only keep abreast of its source materials. Agricultural education in normal and high schools has changed so rapidly since these respective chapters appeared in *Elementary School Teacher* that his most recent reference materials are now histories of past conditions rather than accounts of the present situation. In fact, no more elaborate account of the work of the normal schools than his chapter has yet appeared. The consulting reader will find no more recent or more authoritative account of the movement in its entirety than this timely work.

The bibliography is particularly helpful, 28 pages being given to the annotations of the 202 titles, and "has been selected with the view to presenting typical contributions on various phases of agricultural education in elementary and secondary schools." It also adds 28 titles of textbooks published since 1902 to the 49 listed by Dean Bailey in the *Annual Report* of the Office of Experiment Stations for 1903. The bibliography would, perhaps, be more usable for reference if an alphabetically arranged cross reference list were appended.

C. H. ROBISON

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Fundamentals of French Grammar. By WILLIAM B. SNOW. New York: Henry Holt & Co., 1912. Pp. xi+267. $1.15.

Fundamentals of French Grammar is a book in which teachers of French who believe that even the teaching of elementary grammar should keep in touch with the progress of linguistic science will find some, even if by no means all, of their desires fulfilled; it is therefore a pleasure to call their attention to it. On the other hand, this progressive attitude, apparent in many details to those who are on the lookout for it, is so discreetly taken that the most conservative of teachers or school boards will not be at all alarmed by it, and will undoubtedly find some of its other features to their liking.

Very much in its favor is its brevity, the grammar proper consisting only of 144 pages, in which all necessary "fundamentals" seem to be nevertheless satisfactorily covered. This first part of the book also contains varied, brief exercises, including some translation exercises of isolated sentences. Since translation into French still remains an essential part of college-entrance requirements, even teachers who believe that translation is not only useless, but positively harmful, cannot yet dispense with it altogether; though they might use for other purposes the attractive selections of connected French texts to be found in the second part of the book, and intended, with the trans-

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lation exercises based upon them, to provide "substantial drill material" for intensive work in connection with the grammar. Teachers who use it for this purpose will undoubtedly find that much ground will be well covered in comparatively little time.

Another good feature of the book is the treatment of French sounds, which does, indeed, avoid almost entirely the use of phonetic terms but is "phonetically" sound, as far as it goes. A teacher who desires to take a class farther than the book does will find the way prepared instead of finding it blocked, as is too often the case with other textbooks. The use of the phonetic type is not restricted to marking the pronunciation of isolated words, but whole French exercises are given in it, "at the botton of the page, where those who wish it can find it easily, and those who object to it need not look at it." This conciliating unobtrusiveness may perhaps help to make some converts.

Still another attractive feature is the treatment of the verbs, even irregular verbs being introduced at once (p. 23), since "far better results are obtained when, from the beginning, the pupil learns most forms as derived in accordance with a few simple rules, and then concentrates his attention on the exceptions." Consequently Mr. Snow duly brings out the importance of the shifting of the stress, with consequent vowel-change, in the conjugation of the verb. But his explanation seems questionable. He says, p. 27: "More stress requires more breath; more breath requires a wider mouth opening to let it out; opening the mouth wider means naturally a change to a more open vowel." It can be objected that it is by no means necessary to assume any strengthening of stress for the changes, e. g., Latin *e>ei>oi;* or Latin *o>uo>ue>eu.* The three steps were really (1) lengthening of free vowel; (2) diphthongation, which implies some weakening rather than any strengthening; (3) sound-change of increment. It is noteworthy that this change produced in every case a more closed, by no means a more open, vowel than the original one. The plain statement of the real facts in the case is, and remains, the best explanation.

It is no fault of the book that the treatment of modes and tenses offers itself most temptingly for discussion, a discussion which would lead so far that it cannot be indulged in here. Even where it might be possible to take issue with Mr. Snow's statements, it must be admitted that these objections would by no means call into question the value of the book for use in the French classrooms of schools and colleges, where, it is to be hoped, it will soon make for itself the place and name it undoubtedly deserves.

Essentials of French. By VICTOR E. FRANÇOIS. New York: American Book Co., 1912. Pp. 426.

The object of the author in writing this book was "to prepare an attractive, practical, slowly progressive grammar." A teacher who is in sympathy with the time-honored uncompromising translation method, and either by choice or by necessity desires to reduce the intellectual effort of the pupils as

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much as possible, will find that the author faithfully keeps in his book the promise of the preface. Other teachers, on the contrary, may be repelled by the bulk of the book, and its exceedingly deliberate gait; irregular verbs, e.g., are not touched at all till the fifty-fifth lesson, on p. 194. Each lesson consists of "the French text, which is the pivot of the lesson; a grammar drill, or set of questions, or both; and an English exercise based on the preceding French texts. . . . . The questions are also based on the French text, leaving no excuse to the student for not answering them properly."

This French text, to the very last exercise on p. 344, consists of almost entirely disconnected sentences, so that the "proper" answers of the student will depend, not on any power gained by previous work, but on purely mechanical memory work: e.g., "Que dit-on du lac que vous, avez vu ?—On dit que le lac que nous avons vu est le plus pittoresque du pays. Que pensez-vous de votre sœur ?—Je pense que ma sœur est très généreuse; elle donne à ses amies ses plus jolies fleurs." In this respect the book marks a step backward rather than a step in advance, not only of more recent publications like Effinger and Thieme's or Colin and Sérafon's grammars, but even of older books like Fraser and Squair.

Given the kind of grammar that Mr. François undertook to write, these traits, objectionable though they may appear to some teachers, were most likely inevitable; and it can be freely conceded that the author has succeeded in producing a most painstaking, careful, consistent piece of work, a grammar that should make a strong appeal to those teachers who are in sympathy with the method employed.

Le français et sa patrie. By L. RAYMOND TALBOT. Boston: Benj. H. Sanborn & Co., 1912. Pp. 294.

"To present French which will be easy enough for use early in the first year of study and at the same time be of interest to the pupils" is the very praiseworthy object of the book, and it is undoubtedly true that "both teachers and pupils will certainly welcome information concerning the people whose language they are studying."

This information is attractively conveyed in the first part of the book by a series of dialogues between two young Americans who come together to Paris and go sight-seeing there; in the second part of the book, letters written by one of the two young men to the other, who has left Paris, and also to other friends, take the place of the dialogues, and give interesting glimpses not only of the capital but of other sections of the country. While these accounts and descriptions nowhere reveal a profound understanding of French social and political conditions, they are bright, chatty, and pleasing; they should prove of interest to any wide-awake school or college class, and furnish excellent material for drill in conversation.

That among the host of "facts" stated, some errors should have crept in is scarcely surprising. Thus, p. 61, it was not "en formant la République" that the old division of France into provinces was replaced by the newer one

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into "départements"; this change had already taken place under the reign of Louis XVI. The *lapodrida* (p. 157) is most probably neither a Russian word nor a Russian dish, but rather a corruption of *olla-podrida* given even in the Petit Larousse with the definition: "Mets espagnol qui consiste en un mélange de viandes, de garnitures de légumes. . . . ." A good many of the statements about schools and education in France must be taken with a grain of salt, since a fundamental confusion seems to exist between a French "university" and an American "college." An American high-school diploma falls far short of covering the amount and grade of work demanded for a French *baccalauréat*, and, e.g., the remark concerning the French students who take up professional study on entering a university, "vous voyez quelle différence; nous disons que c'est mieux d'avoir une éducation libérale avant de commencer les études professionnelles," falls of itself.

These slight slips do not detract from the general usefulness of the book, being certainly no greater than might occur in the actual accounts or real letters of almost any bona fide traveler. More serious objections must be made to the language, which seems to stand in need of careful and drastic revision. It will suffice to quote a few of the many questionable passages that can be found on almost every page: p. 33, "à chaque *opportunité*," for *occasion*; p. 35, "*le* caractéristique" for *la caractéristique;* p. 82, "*l'imprimerie* dans tous ces vieux livres," for *l'impression;* p. 108, "corrompent *les morales* des jeunes Français," for *les mœurs;* "*demeurent dans les dortoirs*," for *sont en pension*(?); p. 153, "j'ai même rencontré des gens qui *n'aient pas* compris le français," for *n'ont pas*, or, perhaps better, *ne comprenaient pas*.

These and similar flaws must be eliminated before careful teachers who feel that "idiomatic French" is attainable only at the price of constant care and vigilance will be able to safely place the book in the hands of their beginners.

CHARLOTTE J. CIPRIANI

CHICAGO

Current Educational Activities. A Report upon Education throughout the World. Being the 1911 volume of "The Annals of Educational Progress." By JOHN PALMER GARBER. (Lippincott's "Educational Series," edited by M. G. BRUMBAUGH.) Philadelphia: J. B. Lippincott Co., 1912. Pp. 387.

As the title shows, this is the second volume of an annual series, the first of which was published last year. The present volume follows the same general plan as the volume of last year. Inasmuch as this plan was outlined and discussed in a review of the first volume in the January number of the *School Review* of last year, it does not seem necessary to duplicate that review. This review will therefore deal briefly with distinctive features of this volume.

The general plan of the author is to give special detailed consideration to a leading educational topic each year. In the volume of 1910 "Vocational Education" and "Agricultural Education" were treated as the special topics

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in Part I. In the present volume "Recreation" and "Defectives and Physical Education" are given first place and special consideration in Part I, occupying the first 72 pages of the book. In chap. i, on "Recreation," the author deals with the "Origin and Necessity of Play"; the "Relation of Play to the Body, to the Intellect, and to the Emotional Life"; "Work and Play"; "Playgrounds"; "The Interest of the State in Play"; and "Legitimate Amusements." The author then passes to a consideration of "Athletics," treating of "The Evils of Specialization and Competition," "Football," and "Athletics as a Social and Moral Agency." Then follows a brief treatment of "Rest and Recreation." In chap. ii, on "Defectives and Physical Education," the author treats of the methods of training mental and moral defectives, and the value of play in that training.

The distinctive features of this volume as compared with the previous one are, first, the change in the title, second, the new topic for special treatment, and third, the bibliography which has been added. "Current Educational Activities" characterizes the contents of the volume much better than "Annals of Educational Progress." As was pointed out in last year's review, much of the educational activity herein noted may not be, or indicate, real progress. The new topic "Recreation" and its relation to education is undoubtedly worthy of the special treatment which is accorded it in the present volume, even though the problem of vocational education has by no means been solved; indeed its solution has not even been fairly clearly determined upon. The addition of a bibliography of 33 references to the special chapters on "Recreation" is a distinctly valuable addition to this volume.

The book is not technical; on the contrary, it is a popularly written account of interesting educational activities during the year 1911. As such it is well worth careful reading, for in no other publication with which I am familiar can one find such a comprehensive review of educational developments.

FRANK W. BALLOU

CAMBRIDGE, MASS.

Mouth Hygiene. By JOHN SAYCE MARSHALL. Philadelphia: J. B. Lippincott Co., 1912. Pp. 262.

That a book on mouth hygiene should be written "to meet the needs of school teachers, sanitarians, and the general public" indicates the increasing importance attached to all subjects related to health.

Dr. Marshall presents many facts and figures showing that from 75 to 95 per cent of school children suffer from dental and oral diseases; that neglect of these conditions in the mouth leads to many other and more serious diseases; and that dental and oral diseases are in a large measure preventable and curable.

The measures advocated to improve the present conditions are: the teaching of oral hygiene in the public schools; the daily inspection of the children's

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teeth; the furnishing of a toothbrush to every child—the brushes to be properly tagged and kept by themselves in a special receptacle and washed and sterilized by steam or alcohol after each use; the conducting of a daily toothbrush drill; and the appointment of a trained nurse in every grammar school to have charge of the cleansing and sterilizing of the brushes, and of the toothbrush drill, besides the usual duties assigned to school nurses.

It will be some time before such a plan can be fully carried out in the schools. Meanwhile, there is a great need for a broad campaign of education in the importance of mouth hygiene. This excellent book should be instrumental in arousing interest in the subject and in disseminating knowledge concerning the ways and means of securing practical results.

Elementary Biology, Animal and Human. By JAMES EDWARD PEABODY and ARTHUR ELLSWORTH HUNT. New York: Macmillan, 1912. Pp. 212.

This volume exemplifies the modern viewpoint in science teaching to high-school students who either will not go to college or if they take a college course will not specialize in scientific subjects. The authors state that "the primary emphasis should be placed on the many relations of biology to human welfare." This idea supersedes the plan of the older textbooks to give a complete survey of the elements of a science without regard for the applications of the knowledge gained to the problems of everyday life.

Limitations of time compel a rigid and somewhat narrow selection of groups for extensive study, and only those functions of each animal are considered which have some relation to human biology, or which have a broad, economic bearing. Thus insects are discussed largely because of their injurious or beneficial effects upon mankind; birds and fishes, because of their economic importance, and because of the great need of their conservation; and one-celled animals because of the light they throw on cellular processes.

The same plan is followed in the section on human biology. "The authors believe that in this, the most important part of the course, practical hygiene should be taught as effectively as possible."

The selection and arrangement of material and illustrations are very good, and the presentation is clear and interesting. The information is in general accurate, but one finds a few statements open to criticism. On pp. 119–20: "After violent exercise this organ may beat as often as twice a second"; p. 120: "These often result in permanent thickening of the walls of the valves of the heart"; p. 133: "The second wind that the runner gets after a short time is due to the expansion of all portions of the lung tissue"; p. 136: the Sylvester method of artificial respiration is described and no mention made of the newer and better Schaefer prone-pressure method.

GEORGE L. MEYLAN

COLUMBIA UNIVERSITY

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BOOKS RECEIVED

EDUCATION

Münsterberg, Hugo. Vocation and Learning. St. Louis: The People's University, 1912. Pp. viii+289.

United States Bureau of Education Bulletins, 1912. No. 31 (Whole Number 505). Educational Directory, 1912. Pp. 89. No. 32 (Whole Number 506). Bibliography of Exceptional Children and Their Education. By Arthur MacDonald. Pp. 46. 1913. No. 1 (Whole Number 508). Monthly Record of Current Educational Publications, January, 1913. Pp. 15. Washington: Government Printing Office.

ENGLISH

Aiton, George B. (Ed.). The Autobiography of Benjamin Franklin. Chicago: Rand McNally & Co., 1912. Pp. 314. Illustrated by Homer W. Colby. $0.45.

Sypherd, Wilbur Owen. A Handbook of English for Engineers. Chicago: Scott, Foresman & Co., 1913. Pp. 314.

Tisdel, Frederick M. Studies in Literature. New York: Macmillan, 1913. Pp. xi+333. $0.90 net.

LATIN, FRENCH, AND GERMAN

Curme, George O. (Ed.). Franz Grillparzer's Libussa. With Introduction and Notes. (Oxford German Series. General Editor, Julius Goebel.) New York: Oxford University Press, 1913. Pp. cix+186. Illustrated. $0.60.

Fossler, Laurence (Ed.). Eugen Mogk's Deutsche Sitten und Bräuche. With Notes and Vocabulary. New York: Henry Holt & Co., 1912. Pp. viii+174. Illustrated. $0.35.

Gohdes, W. H., and Buschek, H. A. Sprach- und Lesebuch. New York: Henry Holt & Co., 1912. Pp. x+370. $1.15.

Holbrook, R. T. (Ed.). Honoré de Balzac's Gobseck, et Jésus-Christ en Flandre. (Oxford French Series. General Editor, Raymond Weeks.) New York: Oxford University Press, 1913. Pp. xxv+197. Illustrated. $0.60.

Leiper, M. A. Latin Subordinate Clause Syntax. New York: American Book Co., 1913. Pp. 55. $0.30.

Mezger, Robert, and Mueller, Wilhelm. Kreuz und Quer durch deutsche Lande. New York: American Book Co., 1912. Pp. 260. Illustrated. $0.60.

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Perrin, M. L., and Hastings, F. E. A Table of German Nouns. Boston: D. C. Heath & Co., 1913. $0.20.

Schütze, Martin (Ed.). Franz Grillparzer's Des Meeres und der Liebe Wellen. With Notes and a Study of the Art of Grillparzer. New York: Henry Holt & Co., 1912. Pp. lxxxv +156.

HISTORY AND CIVICS

Gause, Frank A., and Carr, Charles Carl. The Story of Panama, the New Route to India. Boston: Silver, Burdett & Co., 1912. Pp. xiii+290. Illustrated. $1.50.

Wolfson, Arthur Mayer. Outline for Review: Civics. New York: American Book Co., 1913. Pp. 80. $0.25.

SCIENCE

Peabody, James Edward, and Hunt, Arthur Ellsworth. Elementary Biology: Plant, Animal, Human. New York: Macmillan, 1913. Pp. xxiv+170+194+229. Illustrated. $1.25 net.

Segerblom, Wilhelm. First Year Chemistry: A Text in Elementary Chemistry for Secondary Schools. Exeter, N.H.: Exeter Book Publishing Co., 1909. Pp. xxv+410. Illustrated.

———. Tables of Properties of Over Fifteen Hundred Common Inorganic Substances. Exeter, N.H.: Exeter Book Publishing Co., 1909. Pp. xx+144.

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CURRENT EDUCATIONAL LITERATURE IN THE PERIODICALS[1]

IRENE WARREN[2]
Librarian, School of Education, the University of Chicago

Abercrombie, D. W. Honesty in school work. Educa. 33:289–99. (Ja. '13.)
Shows the causes of dishonesty on the part of students, and the suggested remedies.

Anderson, Roxanna E. A preliminary study of the reading tastes of high school pupils. Pedagog. Sem. 19:438–60. (D. '12.)
A study by means of questionnaire blanks filled out by the pupils.

Ash, Isaac Emery. The correlates and condition of mental inertia. Pedagog. Sem. 19:425–37. (D. '12.)
Reports a method of testing the originality and mental alertness of pupils by offering pairs of alternative problems or tasks. The results are correlated with general school standing and efficiency.

Ashley, M. L. Education as growth. Educa. Bi-mo. 7:149–52. (D. '12.)

Barnes, Earl. The education of a partially paralyzed muscle. Pedagog. Sem. 19:518–21. (D. '12.)
A brief description of the form of treatment and exercise by which a case of infantile paralysis was greatly ameliorated.

Brown, J. C. An investigation on the value of drill work in the fundamental operations of arithmetic. II. J. of Educa. Psychol. 3:561–70. (D.'12.)
Conclusion of the study showing the advantage of drill over non-drill methods.

Bruner, Frank G. What shall we teach the subnormal child? Educa. Bi-mo. 7:112–23. (D. '12.)
An argument for training of the subnormal child which shall center in specific and concentrated drill in an industrial process.

Buckham, John W. Study of religion in the university. Educa. R. 45:44–57. (Ja. '13.)

[1] *Abbreviations.*—Cent., Century; Educa., Education; Educa. Bi-mo., Educational Bi-monthly; Educa. R., Educational Review; El. School T., Elementary School Teacher; Harp. W., Harper's Weekly; J. of Educa. Psychol., Journal of Educational Psychology; Lit. D., Literary Digest; Man. Train. M., Manual Training Magazine; Outl., Outlook; Pedagog. Sem., Pedagogical Seminary; Pop. Sci. Mo., Popular Science Monthly; Psychol. Clinic, Psychological Clinic; School R., School Review; School W., School World; Sci. Am. Sup., Scientific American Supplement.

[2] Annotations by Dr. F. W. Bobbitt and Dr. F. N. Freeman.

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Burnham, William H., and Fitzsimmons, M. Evelyn. The educational museum at Clark University. Pedagog. Sem. 19:526–52. (D. '12.)

A catalogue of the articles in the new educational museum which illustrates the development of school hygiene.

Chapman, Maxwell. The honor system at Princeton. Educa. 33:312–14. (Ja. '13.)

A brief statement of methods employed in effectively operating the honor system at Princeton.

Chauncey, Alexander Wallace. The honor system of Sheffield Scientific School. Educa. 33:315–17. (Ja. '13.)

Figures to show class sentiment, and the actual pledges signed.

"Cramming" for civil service examinations. School W. 15:7. (Ja. '13.)

Cutting, Starr Willard. The teaching of foreign modern literatures in our schools. Educa. Bi-mo. 7:97–103. (D. '12.)

The kind of literature and mode of treatment suitable in teaching modern foreign languages in the secondary schools.

Dolbear, Katherine E. Precocious children. Pedagog. Sem. 19:461–91. (D. '12.)

A critical study of the recently exploited cases of precocious children to determine how far their unusual development is due to special training. With a large bibliography.

FitzGerald, Ellen. Writers to read—Montaigne. Educa. Bi-mo. 7:104–7. (D. '12.)

The value of a study of Montaigne's writings to the teachers of composition.

Flower, E. Little village actors. Child (London) 3:328–33. (Ja. '13.)

An account of a play given by children from eight to twelve years of age.

Forbes, Charles H., and Fowler, Henry Thatcher. The degree for college plus school work. Educa. 33:263–75. (Ja. '13.)

Defense of college autocracy and of the classical program. Emphasizes the idea of continuity of secondary and collegiate work, and of the need of integration of courses.

Frazer, Norman L. English texts for schools. School W. 15:1–3. (Ja. '13.)

Grady, William E. Age and progress in a New York City school. Psychol. Clinic 6:209–21. (Ja. '13.)

Hadley, Arthur T. Methods of ascertaining and apportioning cost of instruction in universities. Educa. R. 45:58–69. (Ja. '13.)

Heald, Lucy. George Meredith's interest in education. School R. 21:112–33. (Fe. '13.)

By means of citations and quotations, shows Mr. Meredith's thorough appreciation of educational purposes and needs.

Henderson, Wilson H. What the manufacturer should expect of the manual training school graduate. Man. Train. M. 14:245–47. (Fe. '13.)

Hillix, Foster F. Record and cost keeping in school shops. Man. Train. M. 14:223–28. (Fe. '13.)

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Hutchinson, Jean. Textile industries and their practical application to education. Educa. Bi-mo. 7:173–78. (D. '12.)

Some practical suggestions.

Kendall, Calvin N. The training of high-school teachers. School R. 21:92–102. (Fe. '13.)

Discusses in connection with the training of secondary teachers: academic training, professional study of education, observation of teaching, and practice teaching.

Kirkland, Chancellor J. H. The Association of Colleges and Secondary Schools of the South. School R. 21:103–11. (Fe. '13.)

Considers purposes of the association, college-entrance requirements, examinations, standards, and recent advances.

Lewis, E. E. The present status of vocational subjects in the high schools of California. Man. Train. M. 14:229–34. (Fe. '13.)

(The) "Literary Digest" as a textbook. Lit. D. 46:81. (11 Ja. '13.)

Lyons, Marian C. An argument for business English. Educa. Bi-mo. 7: 108–11. (D. '12.)

Macdonald, Arthur. Diffusion of education and knowledge. Sci. Am. Sup. 75:27. (11 Ja. '13.)

MacDougall, Robert. The child's speech. III. Speech without words. J. of Educa. Psychol. 3:571–76. (D. '12.)

The use of inarticulate sounds as means of expression of emotions and meanings.

———. The child's speech. IV. Word and meaning. J. of Educa. Psychol. 4:29–38. (Ja. '13.)

A continuation of the previous study.

MacGillivray, D. The state leaving certificate of Scottish schools, with special reference to the qualifying examination of the primary stage. School W. 15:5–7. (Ja. '13.)

McManis, John T. The study of children in the normal school. Educa. Bi-mo. 7:124–31. (D. '12.)

Metzler, William H. Problems in the experimental pedagogy of geometry. J. of Educa. Psychol. 3:545–60. (D. '12.)

An elaborate set of proposed tests of the efficiency of geometry teaching.

Milne, William P. The teaching of scholarship mathematics in secondary schools. School W. 15:8–11. (Ja. '13.)

Mitchill, Theodore C. Loss of efficiency in the recitation. Educa. R. 45: 8–28. (Ja. '13.)

Morton, William Henry Stephenson. Retardation in Nebraska. Psychol. Clinic 6:222–28. (Ja. '13.)

A general discussion with bibliography.

(The) most notable school books of 1912. School W. 15:15–17. (Ja. '13.)

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New England Association of Colleges and Preparatory Schools. Educa. 33: 257–62. (Ja. '13.)

Program; records of the business meeting; entrance requirements and the college degree.

Parmenter, Charles W., and Sanford, Edmund C. The degree for college work only. Educa. 33:276–88. (Ja. '13.)

Presents the reasons for recognizing modern courses as equal to the older ones for college preparation. Emphasizes the need of variety and continuity in studies, and of scientific study of the problems as a basis of judgment.

Paton, Stewart. College or university. Pop. Sci. Mo. 82:192–201. (Fe. '13.)

Phelps, William Lyon. Student honesty in college. Educa. 33:300–302. (Ja. '13.)

Plans for a greater University of Montana. Science 37:170–71. (31 Ja. '13.)

Pott, William S. A. The honor system of the University of Virginia. Educa. 33:303–11. (Ja. '13.)

Shows how the honor system has worked in a university that has longest employed it.

(The) Presidents and deans of various colleges for women. Fraternities in women's colleges. Cent. 85:526–32. (Fe. '13.)

Prosser, C. A. Practical arts and vocational guidance. Man. Train. M. 14: 209–22. (Fe. '13.)

(The) public school up to date. Dial 54:81–83. (1 Fe. '13.)

Ryan, Johanna V. Library conditions in American cities. Educa. Bi-mo. 7:157–72. (D. '12.)

Statistics of high-school libraries based on a questionnaire.

(The) Roosevelt professor and the Harvard exchange professor at the University of Berlin. Educa. R. 45:70–86. (Ja. '13.)

Shallies, Guy-Wheeler. The distribution of high-school graduates after leaving school. School R. 21:81–91. (Fe. '13.)

Considers the relative ability of the groups of high-school graduates that enter college, normal schools, teaching without further training, business, industry, and housework, as shown by relative standing in class.

Shepherd, John Wilkes. Some suggestions for the teaching of nature study. II. Educa. Bi-mo. 7:132–48. (D. '12.)

Topics and methods suitable for the various grades.

Smith, David Eugene. The international commission on the teaching of mathematics. Educa. R. 45:1–7. (Ja. '13.)

(The) Society of College Teachers of Education. School R. 21:124–33. (Fe. '13.)

Staples, Clarence Leonard. A critique of high school Latin. Pedagog. Sem. 19:492–509. (D. '12.)

The author maintains that Latin in the high school should aim not at culture nor discipline but at an understanding of the derivation and grammatical structure of English.

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Stone, C. W. Problems in the scientific study of the teaching of arithmetic. J. of Educa. Psychol. 4:1–16. (Ja. '13.)

A detailed outline of problems relating both to the value of arithmetic and to the methods of teaching it.

Storey, Thomas A. A follow-up system in medical inspection. Pedagog. Sem. 19:522–25. (D. '12.)

Describes the system used in the College of the City of New York of enforcing individual advice given concerning medical and hygienic treatment.

Teachers' certificates of proficiency. School W. 15:3–5. (Ja. '13.)

(A) theatre all for children. Lit. D. 46:74–75. (11 Ja. '13.)

Town, Clara Harrison. Language development in 285 idiots and imbeciles. Psychol. Clinic 6:229–35. (Ja. '13.)

The author finds a close relation between degree of mental defect and deficiency in language.

(The) universities. Harp. W. 57:34. (11 Ja. '13.)

Webster, Edward Harlan. Verse making in our schools. Pedagog. Sem. 19:510–17. (D. '12.)

It is argued that children can versify and that the practice would be valuable in a number of ways. Methods of teaching are suggested.

Weintrob, Joseph, and Weintrob, Raleigh. The influence of environment on mental ability as shown by Binet-Simon tests. J. of Educa. Psychol. 3:577–83. (D. '12.)

A comparison of the intelligence of children in the Horace Mann School, the Speyer School, and an orphan asylum, as measured by the Binet scale.

Who broke the window? Outl. 103:75–78. (11 Ja. '13.)

Wilkinson, M. O. B. The executive values in education. Educa. R. 45: 29–43. (Ja. '13.)

Winch, W. H. Mental adaptation during the school day as measured by arithmetical reasoning. Pt. 1. J. of Educa. Psychol. 4:17–28. (Ja. '13.)

The report of an experiment to compare the adaptability to mathematical problems of pupils who work in the early and in the latter part of the forenoon.

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THE SCHOOL REVIEW
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THE TRAINING OF SECONDARY-SCHOOL TEACHERS

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Colleges and universities are beginning to assume their responsibilities in the matter of training teachers for secondary schools. That the nature, quality, quantity, and general efficiency of the work done in the different institutions would have a wide variation is to be expected, but in the departments of education the range of variation is even greater than in other collegiate departments; this is not all due to differences inherent in these institutions, or to their varying points of view, but much of it is due to the various requirements laid down in the laws of the several states.

It seems as if the requirements should touch more closely the work that these teachers are preparing to do; for instance, the required psychology should be that of the adolescent; the school management and methods should be in terms of the needs of the secondary schools; practice should be required, and provision should be made for such practice by legislative enactment.

The recommendation of the Committee of Seventeen, "that opportunity for observation and practice teaching with secondary pupils be given," is farther from being satisfactorily administered by the colleges and universities than any other suggestion that this committee made.

There are no "short cuts," but the way may be made smoother and more pleasant than is usually the case. The difficulty is that

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secondary schools, where they serve as assistants to selected teachers of the subject that forms the student's major or minor subject in the University.

The apprentice teachers assist daily in all the duties of the school and classroom, except to give actual class instruction at the beginning. They coach backward children, keep records, make out reports, criticize written work, prepare blackboard work, conduct written lessons, assemble and set up apparatus and illustrative material, act as laboratory assistants, look after the ventilation, heating, and lighting of the classroom: in fact they do anything that belongs to classroom management.

Another plan that is being used with much success for practice of the Junior year is to have the Juniors teach regularly from one to three periods in seventh- or eighth-grade classes. These grades should be included with those of the high school, as the problems are similar, but the subject-matter is not so difficult as it is later.

Another form of practice that the University of Pittsburgh is using for the Junior year is to have the students act as substitute teachers in graded schools during the illness of the regular teachers, or when the regular teachers are visiting other schools.

This work gives the students confidence and classroom freedom by making them familiar with the details of administration and class routine, and enables them to do these necessary things when they get to teaching with little effort; while with most young teachers the problems of class administration overshadow the instruction, or the reverse is the case, and it is difficult for them to secure a proper adjustment between these factors. It is planned that this adjustment be secured during the Junior year.

The work is also made an excellent practical course in child-study.

The observers go to their work each week with definite problems in mind that have been given to them, and they make weekly reports upon the work that they observe and the work that they do. A supervisor from the School of Education follows closely the work that is being done in observation.

The student's reports, the student's experiences, the head-teacher's criticisms, and the supervisor's observations form the

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material from which the student builds or interprets his theory for subsequent practice, and give him an experience basis that enables him to understand and appreciate in a closer way the work that is being done in his courses in education.

Conferences of all the observers are held weekly by the supervisor in charge of that work.

This work in observation, including everything, is intended to occupy about three hours of each school day through the Junior year.

When the work in observation is satisfactory under the first plan, the student may begin to do a small amount of teaching, not more than one period per day, under the close supervision of the head-teacher. It is preferred that this teaching be in the field of the major subject of the student, but it may be in his minor or in grade work.

When the time for this practice arrives the student prepares carefully the lessons to be taught; the teaching and general results of the lessons are discussed and constructive criticism is given by the supervisor before and after the work is done.

The student in his earlier experiences has learned the routine of class mechanics and now gradually develops his teaching skill by his careful, intensive preparation and presentation of his daily lesson, which is presented under close supervision.

The practice work for the Senior year takes the form of the instruction, discipline, and complete management of a grade, class, or school, for two or three periods each day through the school year. At least one-half of the teaching must be in relation to the major subject of the student.

This work is done in the public and private secondary schools that are accessible to the University by trolley or train.

The apprentice teacher is assigned to a school on application by the school. The quality of the work done, the spirit, accessibility of the school, and the preparation and ability of the students available are the determining factors in making the appointment.

These apprentice teachers are subject to the principal or local school authorities during their period of service, and co-operate

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in every way as members of the regular teaching force of the school; they use the devices and apparatus of the school and follow the local customs and precedents in the administration of the work, where these in any way can affect the organization of the school. The apprentice teachers report for their work, even when the University is on vacation, if the recess periods of the two schools do not coincide.

The apprentice teachers are subject to and expect the same guidance, supervision, criticism, and regulation that the other teachers receive from the local school authorities. The head of the local school sends regular reports to the School of Education concerning the work that is being done by these apprentice teachers.

The School of Education provides for the regular inspection and supervision of these apprentice teachers; they are visited at least weekly, and, if necessary, oftener, and always at unexpected times. These apprentice teachers report in weekly conference to the supervisor the work done during the week passed, giving their ideas of the results obtained, successes and failures; these are discussed and the work for the next week is planned. At this conference each apprentice teacher submits an outline of the work for each day of the following week.

The reports of the student apprentice, the reports from the local school authorities, and the inspections of the supervisor check each other, and thus the School of Education is enabled to follow closely the work that each apprentice is doing; checking, correcting, suggesting, and helping him to acquire the power and habit of self-criticism, and finally to relate intimately theory and practice, in the general conference periods, where most of the principles of pedagogy and school administration are discussed and evaluated in terms of the personal experiences of this group of apprentice teachers. Not the least valuable feature is the fact that they learn to appreciate the problems of other departments than their own and learn how they may co-operate therewith.

The School of Education would be remiss in one of its important duties if it took into this work everyone who thought he had a call to teach. We refuse to take or keep in these courses for secondary teachers any individuals who for any sufficient reason seem to

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the faculty of the School of Education to have misunderstood their call.

The School of Education feels that the secondary schools have a responsibility in the matter of the training of teachers, and also that the state should properly recognize this obligation and aid in this work by making special appropriations to those secondary schools that will enter into closer co-operative relations with institutions that are preparing secondary-school teachers; because it has been shown conclusively that the results of "practicing" upon the children are not detrimental to the children.

The School of Education, believing it desirable to enter into close and cordial co-operation with the schools of the Pittsburgh district, proposed to these schools to furnish teachers, assistants, or substitutes to the schools of the community for short periods of time. These teachers are, without exception, members of the upper classes of the University who are rounding out their professional training with practical experience; they are supplied only to those schools and to those teachers whose standards and methods command the approval of the School of Education after inspection. The only conditions imposed on schools receiving the services of such teachers or assistants are that adequate supervision and criticism be furnished and reports of the work be made to the School of Education at stated times; and in the case of those students who become regular substitutes or apprentices, that the local schools pay the cost of transportation of the apprentice, this being usually ten cents per school day.

Three kinds of assistants are thus given the schools which desire to co-operate with us:

1. Substitute teachers to take charge of a school for a short time in the absence of the regular teacher.

2. Assistant teachers who become regular apprentices to the teacher in charge of the schoolroom or department, serving certain hours daily, attending to the routine affairs of the school, and thus leaving the teacher free to devote herself intensively to the more important things.

3. Regular apprentice teachers who become responsible for the instruction in certain classes throughout the year, the program being

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so adapted that these apprentice teachers can carry on the University work in connection with their teaching.

There are certain manifest advantages in the operation of this plan both to the public schools and to the School of Education.

First, to the School of Education the advantages are:

1. The opportunity to give practical experience to its graduates under natural conditions as they exist in regular schools.

2. The opportunity to become familiar with the needs and problems of the schools of the community, and to keep theory and practice in close accord.

3. The opportunity to show to the public the quality of the work of its graduates.

4. The opportunity for direct, practical aid to the schools which need assistance.

Second, to the schools of the community the advantages are even more numerous and more apparent:

1. Substitute teachers of superior qualifications may be secured in unexpected emergencies without delay.

2. *Overburdened teachers* may lighten their work by turning over the details of schoolroom management to one of our students as a regular assistant.

3. Teachers who are especially strong in one subject or department may be freed for supervision in that specialty by accepting the services of one of our teachers for a part of each day.

4. High schools with limited resources may, with but small increase of expense, add to the number of courses offered by placing certain classes in charge of our students who are specializing in the teaching of these subjects.

5. Principals may get more time for inspection and supervision by utilizing our proffered help.

6. Many of the problems of individual instruction, study-hour supervision, etc., may be solved in the same way.

7. School officers are able, in many cases, to discover first-class teachers among our candidates whom they desire to retain permanently in their schools.

8. In a more general way, the schools becoming associated

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with the School of Education in this manner are in a position to profit directly by whatever of value it may introduce. This, of course, will be a mutual benefit.

9. The University of Pittsburgh gives to each school that is used for training purposes free tuition in a large range of courses in the School of Education. These scholarships are given to the members of the high-school faculty, one scholarship for each student that is in training in that high school. In this way the University returns in tuition to each school an amount equal to that paid to the students for traveling expenses, and the benefit accrues to the teaching force, and the school authorities are paying for the service of the apprentice teacher.

We make no pretense that this service is to be offered to the community without any sort of compensation. It is not a charity and is not thrust on unwilling, unresponsive, or unappreciative schools. It is of great value to the schools, and the schools are expected to render some fair and just compensation in return. This compensation is not to be asked, ordinarily, in terms of money, but in terms of sympathetic co-operation and mutual service. Our mutual task is to furnish the best teachers possible to the community; that is, to the very schools which are asked to co-operate in their training. The School of Education expects, therefore, that the teachers it furnishes to the schools will meet a sympathetic reception, and will be given a fair share of supervision, kindly criticism, and such other help as they may need. These teachers are at least as well trained in point of scholarship as a large majority of the teachers regularly in the service, and their professional qualifications are quite superior to those of most of the new recruits in the profession. They do not detract in the least from the efficiency of the schools receiving them, if they receive the same supervision and help that should be accorded other new teachers; in fact these apprentice teachers are a stimulus to the teachers in service. For example, at present large classes have been divided, part of the class being given to the apprentice teacher, the other part retained by the regular teacher, and the apprentice teachers do not suffer by a comparison of results, because of the careful preparation and the close

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supervision given to them. And when the schools realize their share of the responsibility for the development of good teachers for their own children, sympathetic and helpful criticism is not lacking.

It is not claimed that this is a perfect scheme for solving the problem of furnishing practice teaching for secondary teachers in training, nor that we have it in as good running order as it will be when we have had more experience with the work, but we have no precedents to follow and we do not hesitate to try new things in this work. We invite criticism and suggestion from all interested.

It is in place to say that the plan has given satisfaction wherever it has been tried. The best proof of its value is that schools that have once tried it ask for its continuance, and that the demand for apprentice teachers is larger than our supply. As further evidence of its value, there has been a rapid development of a demand for such training by students who are doing graduate work in education in the University of Pittsburgh.

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A HOME-ROOM PLAN

JAMES F. BARKER
East Technical High School, Cleveland, Ohio

In the school, as in the industries, the developments of the last fifty years have served almost wholly to obliterate the element of personal contact between the leaders and their associates. Formerly a shop superintendent knew and could call most of his men by their first names. The spirit of good fellowship and the respect of each for the other has had a lasting influence upon the industries of this country. But with the passing of the small personally conducted business has come a change in manufacturing, and now the trust with its remote officers and its distant organization has little to maintain the old *esprit de corps*. The schools in their development, with the rest of the country, have been seeking efficiency in administration, and the big city high school, with its thousand or more students, in the very nature of its organization has lost the element of personal contact and has made impossible the friendship between principal, teacher, and pupil. The usual plan, in such a school, of using one room seating the pupils of each year, with the attendant annual changes, does not serve to promote acquaintanceship in the school, but has a tendency to destroy the opportunities for personal control and influence. A high school which annually enrols seven hundred new pupils gives little opportunity for acquaintance. This intimacy is one of the elements in the earlier secondary schools which we have lost. Its influence was potent in the development of character in the high-school students of twenty-five years ago.

Reading *The Varmint*, by Owen Johnson, I saw that the bond of union evident in the description of "the House" at Lawrenceville Academy was evidently stronger than any other of the preparatory-school ties. The plan here described is an adaptation of this scheme. At Lawrenceville the success of the plan was due largely to the small numbers involved, to the hold that the

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master of "the House" was able to maintain over his protégés, and to the spirit of House loyalty. It is not a new device, but has been in use elsewhere for some time in several high schools.

In the East Technical High School in Cleveland no rooms for the seating of pupils by classes were provided, but there were about fifty rooms with a seating capacity of thirty each, to which pupils have been assigned on coming to the school for the first time. This assignment is maintained throughout the pupil's course, and has a neighborhood basis. After a time this serves to promote and utilize the "gang motive," of which Dr. G. Stanley Hall speaks so enthusiastically in his work on adolescence. Thus, on entering the Technical High School, boys coming from the Columbia Grammar School are always assigned to Room 105, and thenceforth are known as Mr. Meck's boys. In the same way, the girls from the Columbia School are assigned annually to Room 207, and are known as Miss King's girls. (The girls and boys are segregated in nearly all work, owing to the differentiation in their technical courses.) Two or three schools sending small numbers to the high school each year are combined. To preserve democracy, unlike neighborhoods are fused, and it is so arranged that about ten or twelve new pupils are added to each room each year. In the case of a single school sending large numbers yearly, sometimes a division is made. Thus the Bolton School has two rooms for boys and one for girls, to take care of the large numbers entering the high school from this district.

Pupils so assigned may never recite to their home-room teachers. This assignment is made solely for the purpose of supervision, and is an effort to bring at least one teacher in the building into closer relation with each and every individual pupil. This relationship, once established, is broken only when the pupil leaves the school. Ere long the spirit of good fellowship develops between the teacher and his home-room group. He becomes their father in the school; he becomes their defender, and as his responsibility increases, he takes more and more real interest in his boys. By the time he has had his group four years, there springs up a real affection between the home-room teacher and his pupils. The addition of a dozen new pupils each year gives the home-room teacher but a small

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number with whom to become acquainted annually, and eventually produces a group of about twenty-five or thirty. This number is sufficiently small so that the home-room teacher gets very close to the hearts of his boys before they leave him.

In this way, school spirit grows, in place of class spirit, and serves to develop control in all school activities. Within the school the plan is not without its effect upon scholarship. It is our custom to conduct weekly morning exercises through the fourth year, the valedictorian presiding and the salutatorian acting as secretary. Interest runs very high among the home rooms at the time when the averages for these two offices are being worked out. Discipline becomes easier on account of this organization, attendance improves, and many other school problems solve themselves.

I remember the anxiety of one group, which had had neither absence nor tardiness during the term, on the morning when delayed street-car service was detaining a member of the group, and how they secured signed testimony from the Street Railway Division Superintendent that this boy's tardiness was due to a street-car accident, and therefore not to be counted as tardiness.

Home-room pride soon becomes a factor, and the little knots of students comprising the units seek to promote the home-room influence in the school; they seek for recognition in school organizations and representation upon school teams. They have home-room teams of their own, and play competitive games in a school league. When the school annual is published, and representation on the school organizations are all printed, the rooms point with pride to this or that successful writer, debater, athlete, musician.

Not only the boy is benefited by this, but it reacts upon the teacher, who takes pride in his room organizations. The pupils soon learn that, after all, their home-room teacher is a human being, with interests not very different from their own.

Only recently, one of the boys was absent from Room 19, and inquiry from the neighborhood boys developed the fact that the absentee had been injured in an automobile accident. A teacher having charge of two hundred first-year students would have little interest in an individual, but the teacher in Room 19 had only

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twenty-five boys, three-fourths of whom he knew intimately. Forthwith he went to see this boy in his home, and found a pitiable condition. The boy's leg was broken, and he lay upon the bed with nothing to relieve the monotony of his sufferings but one book, the sole literary property of the home, the *Geological Survey of the State of Ohio for 1900*. And so the home-room teacher sought out his stock of magazines, solicited additional ones from other teachers, and carried these to the boy. When the pupil finally recovered and re-entered school, the friendship which resulted served more than once to bridge the boy's difficulties in the school. Perhaps it has even served to keep the boy's work up when he might otherwise have left in discouragement.

Again, two pupils were recently sent from a class by a subject teacher; they complained bitterly to the home-room teachers of unfair treatment. Both teachers, who had faith in them, hailed the offending subject teacher before the principal in defense of their boys: the matter was adjusted, and we did not have an attack of *parens iratus*.

Last spring, on Arbor Day, some of the home rooms planted sycamore trees in view of the windows of their rooms, and are taking pride in their trees. Some day the pupils from these rooms, grown to men and women, will come back to the school and view with pride the tree which belongs to their room, and which they planted.

The influence of the home room extends beyond our own walls back into the eighth grade of the grammar school. Boys will come to a high school more readily if they think they are not to be lost in the great unknown, and who could want a better pleader with a boy to come to high school than one of his peers? Furthermore, the home-room teacher comes to know the grammar-school principal from whose building his pupils come, and the eighth-grade teacher becomes acquainted with the home-room teacher to whom her graduates are going. This also is retroactive, and serves to stimulate the good feeling between the eighth grade and the high school. So the element of personal contact, usually lost in the organization of a big city high school, need not be lost after all, and the spirit of co-operation, of mutual admiration and respect, comes to live again in the home room.

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THE SIX-YEAR HIGH SCHOOL

GEORGE WHEELER
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In traveling over the main line of the Pennsylvania Railroad I have noted with interest the marvelous changes that have been made in recent years in the roadbed of this great highway. What impressed me most forcibly was the fact that for a large part of the way the old roadbed has been abandoned. It was built when the world moved much more slowly than it does today. Time was plentiful and money was scarce. It was cheaper to build a crooked railroad, winding around the hills instead of cutting through them, following long curves of the streams to save the expense of building bridges, and crossing the streets of towns and cities at grade. In recent years the railroad has spent many millions of dollars to dig tunnels and cuts, build embankments and bridges, and elevate or depress tracks in cities. Once the question was: "Which is the easiest and cheapest way to build the road?" Now the question is: "Which is the most direct low-grade line?" Once the aim was economical construction; now it is economical transportation. The efficient handling of traffic had to be secured though it meant abandoning the old line and building a new.

The educational roadbed over which our pupils travel in the public schools was originally laid out in much the same way that the original railroads were planned. Much that exists in educational procedure today is there simply because it was the best that could be afforded at the time it was instituted. The country was poor. Educational expenditures were small. Equipment was meager. Buildings were inconvenient and unattractive. Books were scarce and costly. School terms were short. Teachers were poorly trained and worse paid. There was no general supervision and, therefore, each community had its own peculiar type of school organization. Many of these still survive. They have no relation

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to present conditions. They are what they are simply because they started at a time when, owing to circumstances, nothing better could be done. The tendency of human nature to follow the beaten track explains the rest. But the same business advance that is straightening out the railroad tracks is putting more direct methods into the schools. The same business foresight that throws into the scrap heap fairly efficient machinery and puts in its place the finest modern apparatus is coming into our schools, breaking down our fairly good plans of organization and putting in their places the finest devices of the most skilful educators and administrators.

The prevailing practice of having *eight* grades in the elementary schools and *four* grades in the high schools is not the result of a deliberate plan based upon sound educational principles, but is due largely to the fact that the private academies and colleges were flourishing institutions long before free public schools had made much headway. At first the public school had no definite goal in mind. There was no clearly planned course of study and the grade of instruction varied with the abilities of the successive teachers. The quality of the work slowly rose until the best work in the public schools reached the standards of the academy. Pupils who had been in the public schools about eight years were able to enter the academic work proper. The academy has since given way to the public high school but the meandering eight-year elementary course which led to the academy is still used in reaching the high school.

"Why has the giraffe such a long neck?" asked the teacher. "Because his head is so far away from his body," was the small boy's answer. Why has the elementary school so long a course? Because the high school is so far away from the first grade. The vital considerations were not thought of when the present practice was established. The fact that the mental, physical, and spiritual life of the child undergoes a marvelous change between the ages of twelve and eighteen; that there are certain peculiarly favorable periods for the study of certain subjects; that pupils vary greatly in special aptitudes and therefore need an experimental period in which to test various lines of work before selecting a definite higher course of study; the need of a transition period from the one-teacher régime to the departmental plan in the high school; these,

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and a multitude of similar considerations which should determine the organization of our schools, have received little or no attention in determining the subdivision of public-school work in the eight years of elementary and the four years of high-school training. The lack of a sound basis for the present plan has become plainly evident under the critical studies of scientific investigators. Thoughtful students of education are breaking away from the 8–4 arrangement because they find that it is a piece of educational machinery of too low an efficiency for use in a modern school system. This unrest has given rise to a large variety of experiments. Gary, Ind., carries the pupil forward for ten years in one building and follows this with two years in a separate high school. Denver has the 8–1–3 plan, using the ninth school year to make the transition from the elementary to the high school. Muskegon, Mich., uses the 7–5 plan; Kalamazoo modifies it into the 7–3–2 plan. Another group, including part of New York City, follows the 6–2–4 plan. Finally, a considerable number, including Los Angeles, Grand Rapids, Evansville, Ind., report that they are using either the 6–6 plan or the 6–3–3 variation of this plan.

If I read the signs aright, in all of this experimentation there is a rather strong drift toward an ultimate settling upon a six-year elementary-school course, followed by a six-year high-school course, but with the latter divided into two rather distinct periods of three years each, thus constituting a junior and a senior high school with the definite purpose of making the junior high school the connecting link between the elementary school and the formal high school. The elementary course is also, to some extent, marked off into two three-year periods but the line of division is not so great as to require separate organization for proper handling.

Briefly, then, the tendency seems to be strongly toward changing from the 8–4 to the 6–3–3 plan. Frankly, I confess that when the thing was first suggested, I did not see what there was to gain by the change. It looked to me like an attempt to make something out of nothing by juggling figures. There is a total of twelve years of schooling in either case. It seemed like saying that, if I had eight dollars in one pocket and four dollars in another, I should in some mysterious way be better off if I redistributed it so as to have

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six dollars in one pocket, three dollars in another, and three dollars more in a third.

But a child's mind is not so much like a pocket as like a garden, and what it contains does not so much resemble dollars as plants. Neglected, this garden grows up in noisome weeds of ignorance and vice. Cultivated, it produces plants of use and beauty. What the crop shall be and what it shall be worth depends very largely upon the school. In the school life of the child there are two strongly differentiated growing seasons of equal length, each with its own most suitable crop and requiring its own special method of cultivation. The first matures when the boy is twelve and the second when he is eighteen years of age. The mistake we make is that we take eight years of time to raise a six-year crop, and much of it spoils from withering or overripeness. For the second six-year crop, only four years remain, and it fails to mature. It is in this sense that the 6–6 plan is vastly better than the 8–4 plan.

The six elementary years when scanned closely are seen to consist of two three-year periods. At first the attention of the pupil is in large measure fastened upon what may be termed the mechanics of education. By the end of the third grade the average child writes as legibly as he ever will. He has mastered the mechanism of the reading process and can add, subtract, multiply, and divide with numbers of fair size. In other words, he has opened the door of the three R's.

In grades 4, 5, and 6, the mechanical ability acquired in the first three grades is put to use in knowledge-gathering. The pupil uses his ability to read in the study of geography, elementary history, and juvenile literature. He extends his mathematical thinking from whole numbers to fractions, common and decimal. He learns the common weights and measures, and applies his knowledge in arithmetic to the common activities of everyday life. He handles the pen more freely and can now use it to a considerable degree as a means of expressing his thought. Composition and letter-writing have held an important place in his work. To sum it up, he has passed over the threshold and taken possession of the three R's.

He is now twelve years old. It is a critical moment. His

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future career depends in large measure on what we do for him in the next three years. He feels the first impulses of adolescence driving him to new interests, ambitions, and activities. Much that once interested him greatly now begins to appear flat, stale, and unprofitable. If we choose to do so, we can keep him working with the same old material in the same old way. The compulsory law gives us possession of him for two years longer and he has to submit. But, if we do, we need not wonder that he becomes dissatisfied and leaves school as soon as he reaches the age of fourteen. He is tired of childish studies and childish methods and goes to work in order to "get a chance to do something worth while." Whether or not a pupil remains in the school past his fourteenth year depends very largely on what is done for him in the seventh and eighth grades. At the very best the period from twelve to fifteen is full of whims and restlessness, and many will drop out of school in spite of our best efforts. Under the 8–4 plan the break in his school career comes in the very midst of this critical time. The compulsory attendance law loosens its grip just when he completes his elementary course. Given a restless boy, a change of schools, and the legal right to leave school, all meeting at the same time, and you have a coincidence that is responsible for much of the tremendous shrinkage in numbers between the eighth and the ninth grade. Postpone the change of schools for a year and you break this dangerous combination. If at the same time we plan the work so as to hold his interest to fifteen, we can probably hold him longer. The mind of the twelve-year-old has a powerful craving for something new and different. Through the junior high school we can do much to meet this perfectly normal desire. The subjects of study have a broader range, a more practical bearing, and a more vital interest. Attention need no longer be concentrated upon the three R's for their own sake. They have become merely the means for more advanced educational endeavor and accomplishment. To read, to spell, to write, to handle whole numbers and fractions—these processes have in large measure become automatic. Arithmetic is now applied to more and more varied phases of life, and at last leads out into the generalized processes of algebra. English literature and the technique of the language receive definite atten-

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tion. This is a favorable time for those who are looking to higher academic training to begin the study of a foreign language. Myths, legends, and anecdotes give way to formal history. Geography takes a more scientific form. Biology supplants elementary nature-study. Elementary physics and chemistry may now be introduced. Drawing takes on more specialized and practical forms. Cooking and other phases of domestic economy for girls and varied types of shopwork for boys give an outlet to their strong desire to do practical things. Physical training, especially adapted to their peculiar needs, can now be given.

It is plain that this varied program cannot be carried on under the one-teacher plan that has prevailed in the first six grades. A modified form of departmental work should be used, not only because the work can thus be done better but because it is highly desirable to go by easy stages into the full departmental plan of the senior high school. The confusion and bewilderment caused by the sudden plunge from the one-teacher régime of the elementary school to the departmental plan of the high school has been responsible for the failure and withdrawal of many first-year high-school students. The junior high school gives an excellent opportunity to make an easy transition from one plan to the other.

Of the place of the senior high school in this plan I need speak but briefly. It would differ but little from its present type of organization and curriculum. The junior school has given the pupil an opportunity to try out varied lines of interest. He is now better prepared to choose his course wisely. His past three years have given him some guidance in determining whether he shall take up academic, commercial, manual, or trade work. He fits in the work because he has grown, and not been thrown, into it. Where this plan has been tried, high-school attendance has greatly increased. This tells its own story.

But the question will naturally come, "Is the new plan costly? Can we afford to use it?" Consider for a moment the following matters. The seventh and eighth grades are usually the smallest in a school. Frequently there are so few pupils of these grades in our smaller schools that they cannot be well classified and organized. Collect in one building these weak classes from several schools and

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you have at once sufficient numbers for proper and economical handling, probably with some saving in the teaching force. Our high schools are costly institutions to run. In Philadelphia the total cost of teaching a pupil in the high school is between three and four times as great as it is in the elementary schools. More than one-third of the pupils now in high schools are in their first year. Join these to the seventh- and eighth-grade pupils to complete your junior high school and you make another material reduction in the cost of instructing this large group of students. There is reason to believe that the junior high school will enable us to do better things and save some money at the same time.

Briefly to summarize, the following are among the advantages of the 6–3–3 plan:

1. It fits the work more closely to the pupil, thus retaining many who formerly dropped out from lack of interest.

2. It shifts to a less dangerous period the change of schools which now occurs just when the compulsory law loses its hold.

3. It provides easy transition from the one-teacher régime to the departmental plan.

4. It provides a definite period in which interests and aptitudes may be tried out, thus lessening the number of educational misfits in the higher courses.

5. It tends to reduce waste in the matter of equipment and teaching force, thus giving the community a larger return for its educational expenditures.

The lines have been surveyed and located for a better educational roadbed for boys and girls. It means the abandonment of some of the old right of way, but each suggested change is for the better. It does not require additional funds; indeed there may be some saving. When we make these matters clear to our boards of education and to the community, the road can be put in operation and we shall be one step nearer to an ideal school system.

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THE BIBLE AS LITERATURE IN THE HIGH SCHOOL

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Although the English Bible has been generally recognized as the most important book in our history, both for general culture and for special moral stimulus, there seems to be a widespread belief that there are insuperable obstacles to its use in our public schools. Is this belief well founded? Some years ago at the suggestion of one of his pupils the present writer introduced a course in the literature of the English Bible in a public high school. Its introduction and continuance were so entirely unopposed, and it met with such quick response in interest and appreciation, that it seems worth while to tell the story.

It was in the city of Spokane, in the year 1904. The student who started the movement was a boy in the eleventh grade, alert, active, venturesome, something of a leader among his fellows. He had been talking in thoughtful mood with one of his classmates, and came to me to ask why the Bible might not be studied in our school as well as other masterpieces of literature. He knew a number of students who would be glad to enter a class for its study. At first I was somewhat surprised and doubtful, but the more I thought the more I could see no reason why parts of the Bible might not be studied by high-school students with as much interest and profit as attended the study of Shakespeare and Milton. I consulted the principal and the superintendent. They could see no objection and asked me to go ahead and plan a semester's course. I did so and announced it as open to election by students of the eleventh and twelfth grades. I explained that only those should enter the class who wished to study the Bible as nearly as possible without prejudice, with the first object of discovering what its writers really wished to say, just as we studied Milton. I further stated that any questions might be asked and discussed

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in the class which sought to reach the writer's purpose and to make clear his meaning. Over twenty students elected the course, most of them boys, and a number of them boys of marked individuality and independence, leaders in student activities. The course was taught during six semesters. Under my successor it was more popular than it had been under me, in fact the number of students who might enter the class had to be limited; and it was discontinued only because the teacher was promoted to the principalship of a new high school and there was no one at hand to continue it.

The popularity of the course was not due to its being easier than others; it called for a great deal of reading and much thinking. Its plan was suggested by Professor Moulton's *Literary Study of the Bible*, and it included the following elements: (1) narratives: selected chapters from Genesis, Exodus, and the Books of Samuel and Kings, giving the stories of Abraham, Isaac, Jacob, Joseph, Moses, and David; (2) idylls: the Book of Esther and the Book of Ruth; (3) orations: the earlier and later chapters of Deuteronomy; (4) lyrics: the Song of Deborah, the lament of David over Jonathan, and selections from the Psalms; (5) wisdom literature: selections from Proverbs and Ecclesiastes; (6) the Book of Job. This plan was modified from time to time. Once the Song of Songs was added, and once or twice selections were made from the prophets. These were not very successful: the students were scarcely old enough to appreciate the emotional warmth of the former, or the complex social and political background of the latter. In the attempt to concentrate study and to relate the ancient writings to permanent human interests and to present-day problems, questions were assigned in advance upon each day's lesson. For instance, on the story of Jacob these questions were asked: Might Jacob have justified himself in his deal with Esau by saying, "Well, if he didn't want to sell his birthright for the pottage, he didn't have to"? "How do you account for the change from the Jacob who thought only for himself when he left home, to the Jacob who cared first for "the mother with the children" when he returned? On the Book of Ruth: Why is this called the Book of Ruth rather than the Book of Naomi? Is there any justifica-

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tion in the story for the picture of Ruth given in Keats's "Ode to a Nightingale"? On the Hundred and Fourth Psalm: What can you tell from this poem of the land in which its author lived? Compare his knowledge of the sea with that of the author of the Hundred and Seventh Psalm. On the Prologue to the Book of Job: Does Satan appear among the Sons of God as an intruder or as one who rightly belongs with them? What is his business? Does Job's submissiveness under desolating affliction seem to you natural? Give reasons for your opinion.

The class was as varied in membership as any other in the school. It had members of Unitarian and Jewish as well as of devoutly orthodox training, while some of its members had very slight religious interest and one professed to be agnostic. Yet sectarian animosities never appeared in the class discussions. The writings were studied as revealing and criticizing human life, and in the honest effort to understand the revelation and the criticism sectarian prejudices were apparently forgotten.

The members of the class were generally industrious and thoughtful. The easiest parts of the course were not the parts they liked best. They were asked several times to say what study had been most interesting and had seemed most worth while. Always the majority voted for the Book of Job. The most striking fact in the attitude of most of the class was their eager admiration for moral strength and heroism. No situation impressed them more deeply than Job's triumph over his own apparent utter destruction in his confident assertion, "Yet shall the righteous hold on his way, and he that hath clean hands shall wax stronger and stronger."

This experiment in high-school English is now far enough away in time for me to see it clearly and in perspective. The course and the way in which it was taught were very imperfect, yet it seems to me to have been a decided success. I consider it now as I did then, and as I know my successor did, of unusual promise in comparison with other courses in literature for high schools. The deepest issues of life are moral issues and the most difficult judgments are moral judgments. Here was human utterance so

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serious, so varied, so simple and direct as to bring sharply to the consciousness of boys and girls on the threshold of manhood and womanhood the great personal and social problems that are common to man in all times and places. Where else in literature is the transforming power of love and labor depicted so clearly and with such restraint as in the story of Jacob? Where else is the brotherly relation so simply and so broadly treated as in the story of Joseph? Where else are the issues that determine the life and death of nations so directly and powerfully presented as in the orations of Moses? Where else is loyalty to truth in the face of overwhelming odds so grandly portrayed as in Job's struggle to keep his soul? Why should not these be offered to high-school students as well as the *De Coverley Papers* and the *Merchant of Venice?*

From what the students said of the course at the time, and from what some have told me since, as men and women in homes and with business of their own, I know that they also regarded it as of great value. It gave them welcome opportunity for the frank discussion of those issues of life whose importance seems to be sometimes the excuse for their neglect. The Bible literature class was for them a place of comradeship in ways of thought and feeling where too often the young adventurer in the world of men walks uncertain and alone. The comments of the students upon the course showed unmistakably that in many cases it had opened to them a new world, a world of moral earnestness and spiritual aspiration such as their young eyes could scarcely discover in the stir and haste of a modern city.

The city in which this took place is not unusually moral, neither is it unusually indifferent to what is taught in its schools, yet never from first to last was there heard a word of protest against this teaching of the Bible in its public high school. This story is written in the hope that other teachers in other schools may repeat the experiment. An interested and sympathetic teacher, with ordinary preparation and tact, may, through such a course as this, open to boys and girls the book from which Cromwell gained strength, from which Lincoln learned wisdom.

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LIVING VERSUS DEAD BIOLOGY

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Dead biology teaches the unity of all life, and the cell as the ultimate source of living matter; living biology teaches the interdependence of all things living and their interactions each on the other. Biology, whether dead or alive, must be taught in such a way that it develops the power of observation, of logical thought, of constructive interpretation. To show the unity of all life, the dead biology requires an intensive study of the internal structure of plants and animals. To show the interdependence of all things living and their interactions each on the other, the living biology requires an extensive study of the life-habits of plants and animals. It might be interesting to question the relative merits of the two biologies as mental stimulants and developers. But when we reflect that mental and moral discipline is largely habit and that habit functions and persists only by use, we must agree that the applicability of a subject to the general life of the child is a safer criterion of merit than is its applicability to the mere school life of the child. From this point of view, it is clear that the method of study which relates its work to the universal life of the pupil produces greater mental development than the method which relates its work to an isolated phase of the pupil's life; namely, the classroom phase. From which biology, then, the living or the dead, can be secured to the pupils, along with mental power in biological concepts, the greatest number of useful, usable life-habits?

As has been said, the predominant thought in the dead biology is the unity of all life. The concept of the unity of the diverse forms of matter is an extremely difficult one, and is capable of comprehension by mature intellects only. In order that the child's mind may be developed and made ready for this ultimate concept, rigorous work in minute dissection and in elaborate microscopic interpretation is required of him. The predominant thought of

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unity can be developed only through the study of structure and of structural development from simple to complex forms. Whether such work relates itself to the universal life of the child is immaterial to the dead biology, the sole purpose of which is to increase the pupil's mentality to the point where the unity of diverse forms of life is comprehensible. The fact that such a concept in no way directly affects the personal, domestic, and civic life of the pupil is disregarded by the school of the dead biology.

The predominant thought of the living biology is the interrelation of all things living. This absorbing idea is developed through the study of the dependence of plants upon inorganic matter, the dependence of animals upon plants, and the dependence of man upon all three, inorganic matter, plants, and animals. In living biology structure as structure plays but a small part, while life-history and economic importance are the large elements. How does the animal or plant secure food and shelter, and how does it cope with its world? In such study, the pupil is brought in touch with creatures whose problems are similar to his own. Here the laboratory—the workshop of the dead biology—is deserted for the world itself, which thus becomes the laboratory of the living biology. The dead bee and ant are nothing to the pupil, but from the living, active ant or bee colony, he learns community life, the strength of the many as contrasted with the weakness of the few. From other simple studies of plants and animals he learns the close influence which plants and animals exert on man's supply of food and raiment; cotton from the cotton plant, silk from the cocoon, the relation of the wheat midge to the size of a loaf of bread, and of the cotton weevil to the cost of cotton. He learns that a better understanding by man of plant and animal life and their relation to soil, climate, etc., is absolutely necessary if man's needs are to be met in the future; for example, the relation of the ladybug to the fruit-tree scale, of the ichneumon fly to insect pests, of the cactus plant to the desert, of certain crops to dry farming, etc. He learns that not only his comfort but his very existence itself is jeopardized by animal and plant life, by the fly carrying typhoid fever, by the mosquito carrying malaria, by the rats carrying the bubonic plague, and by various disease-producing bacteria.

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The old biology which limits its observation mainly to the microscope or at best extends it to the four walls of the laboratory does not relate itself to the present life of the child. The new biology does relate itself to the present life of the child because it extends its observation and investigation to the filtration plants which supply him with water, to the dairies which furnish him with milk, to the fly-infested shops which supply his meat, to municipal hospitals, to quarantine stations, to day nurseries, to uncovered garbage cans, to markets and shops with loathsome vermin, to gutters and drains with dangerous breeding-places, to the city trees devastated by pests, to the reclamation of waste lands by irrigation and drainage, and to a host of other practical subjects.

Increased mentality results—yes, and along with it, as life-habits, increased interest and responsibility in affairs personal, in affairs domestic, in affairs civic, and in affairs national.

Another by-product of the living biology is the opportunity it offers for the development of the aesthetic sense. The average person is far from being an artist, as is evident from the ubiquitous demand for the colored supplement of the Sunday newspaper. The aesthetic sense latent in the child is stimulated if he is taught to beautify the school and home by growing plants. Microscopic study of plant and animal life does not influence the aesthetic taste; on the other hand, the macroscopic study of flowers, leaves, birds, butterflies, etc., strongly develops aesthetic perception and appreciation. In our own school this is very evident. In the drawing department the designs used by the pupils have their origin in the living plant and animal life available in the laboratories rather than in conventional geometric forms; and the pupils of the living biology show far more artistic perception and appreciation than those taught under the dead biology system. To see the beautiful and to reject the false is a life-habit which is essential to high moral living, and any method of study which intrinsically fosters such habits cannot be too strongly commended.

Deliverance from superstition is an important by-product of the living biology. In olden times the horror of frogs was so great that the harmless animal was the symbol of all that was vile and loathsome, and for centuries served to represent despicable deeds and thoughts. Because of this unfounded superstition

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thousands of frogs were killed, and in consequence infinite hordes of destructive insects were left to breed in ponds. The graceful dragon fly is feared by ninety children out of a hundred because of the legend which relates that it sews up the lips. The study of living animals frees the mind of the pupil from fear and repulsion of harmless creatures; and every time a human being is freed from superstition, however insignificant, he is brought into clearer vision. Not only is superstition removed from the mind, but in its place is substituted reverence for the creatures whose lives are helpfully interwoven with his own.

One of the most conspicuous life-habits engendered by the living biology is that of securing diversion and recreation by natural rather than by artificial methods. The half-holiday walk in the open is not the same to the students of the living and of the dead biology. Pupils who could sketch accurately the conjugation of varied algae, and the cross-section of complex plants, often walk through the woods entirely oblivious to the marvelous natural beauty there. Pupils must be taught to see the printed page with an understanding eye; they must likewise be taught to see Nature with an understanding eye; and the school owes it to the child to give to him the key to the book of Nature as well as to the book of letters, to give to him an indirect means of pleasure as well as an indirect means of work. The living biology with its vision into natural diversions tends to emancipate present and future generations from the craze for artificial entertainment, and to make available to them for their leisure hours simple, healthful recreations.

The living biology, then, is a powerful factor for social uplift. It increases mentality in the abstract by its classroom work; it increases efficiency in the concrete by its unceasing application of scientific laws to the daily happenings of life. It raises the moral tone by its applied lessons on the interdependence of society, and by the responsibility which it thrusts upon its adherents of carrying out their lessons by right living. And, last, it not only gives to its students lessons in ethical standards, but it gives them ways and means whereby such ethical living is made possible, namely, simple recreations, responsive kinship with all creatures, hygienic practices, and a wide vision of man's relations to his fellow-man.

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RELIABILITY OF GRADING WORK IN MATHEMATICS

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The present article is a sequel to the recent investigation of grading work in English[1] which revealed rather wide variations and differences among teachers in evaluating the same examination paper. It has been urged that marks in determining the merit of language work would necessarily vary considerably because of the personal and subjective factors involved, and that the situation would be very different in an exact science such as mathematics. Pursuant to this suggestion we have made a similar investigation with a geometry paper. This paper was written as a final examination by a pupil in one of the largest high schools in Wisconsin. Plates of this answer paper were made and several hundred copies were printed upon foolscap, thus exactly reproducing the original in every detail.

QUESTIONS

Choose 8, including one selected from 4, 6, and 8.

1. Two triangles having the three sides of one equal, respectively, to the three sides of the other, etc. Prove.

2. Prove that every point in the bisector of an angle is equally distant from the sides of the angle.

3. An angle formed by two intersecting chords is measured by, etc. Prove.

4. If the middle points of two opposite sides of a quadrilateral be joined to the middle points of the diagonals, the joining lines form a parallelogram.

5. To construct a mean proportional to two given lines. Explain fully.

6. AM is a chord of a circle, xy is a diameter perpendicular to AN and intersecting AM at O. XO is 10 in. and ax is 20 in. Find the diameter of the circle.

7. The ratio of the areas of two similar triangles is equal to, etc. Prove.

8. Find the area of a right triangle whose hypotenuse is 1 ft. 8 in. and one of whose legs is 1 ft.

9. The sum of the interior angles of a triangle is equal to, etc. Prove.

10. If two circles are tangent, and two secants are drawn through the point of contact, the chords joining the intersections of the secants and the circumferences are parallel.

[1] D. Starch and E. C. Elliott, "Reliability of the Grading of High School Work in English," *School Review*, XX, 442–57.

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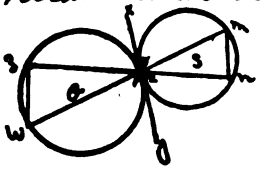
Answer to question X.

I If 2 ⊙s are tangent and 2 secants are drawn through the point of contact the chords joining the intersection of the secants and the circumferences are ∥.



Given the 2 ⊙ O and S tangent and the 2 secants gn and Wm connect their extremities and prove gW and mn are ∥. Draw the common tangent x y.

∠g is measured by ½ arc WO (an inscribed ∠ is measured by ½ the intercepted arc.)
WO is measured by ½ arc WO (a tangent and a chord is measured by ½ the intercepted arc.)
∠1 = ∠g. ∠m is measured by ½ arc nO (an inscribed ∠ is measured by ½ its intercepted arc.) ∠2 is measured by ½ arc no (a tangent and a chord is measured by ½ its intercepted arc.)

∠1 = ∠2 because a line making a tangent at the point of tangency ⊥ to it. If g O ⊥ to x y and n O ⊥ to x y ∠1 = ∠2 ∎ ∠s.

∠1 = ∠g ∠1 = ∠n. things = to the same thing are = to each other ∠g = ∠n. 2 st lines cut by a transversal so the alternate interior ∠s are = the lines are ∥ ∴ gW and mn are ∥.

[Reduced about one-half]

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A set of questions and a copy of the answer paper were sent to approximately 180 high schools in the North Central Association, with the request that the principal teacher in mathematics grade this paper according to the practices and standards of the school.

One hundred and forty papers were returned. Twelve had to be discarded because some of the data called for were not given.

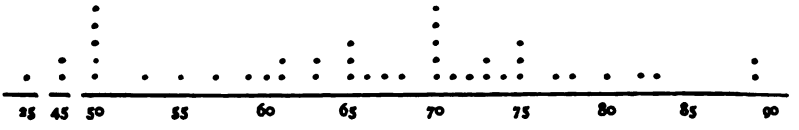

FIG. 1.—Passing grade 70. 43 schools. Median 67. Probable error 8.

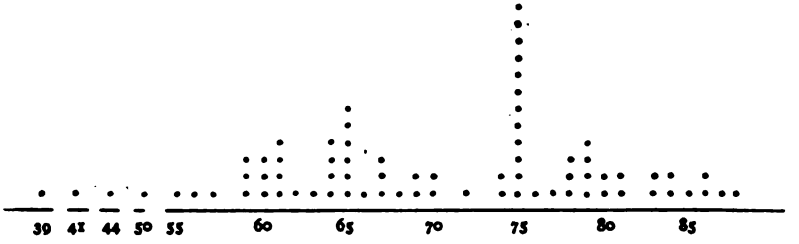

FIG. 2.—Passing grade 75. 75 schools. Median 70. Probable error 7.2.

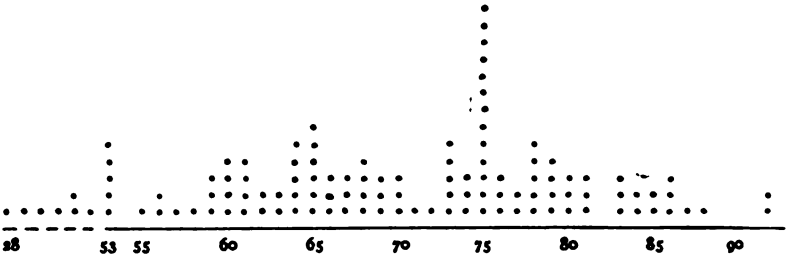

FIG. 3.—Passing grade 75. Marks assigned by schools whose passing grade is 70 are weighted by 3 points. Median 70. Probable error 7.5.

Of the remaining 138, 43 came from schools whose passing grade is 70, 75 from schools whose passing grade is 75, and 10 from schools whose passing grade is 80. The papers show evidence of having been marked with unusual care and attention. Separate grades and comments usually accompanied the answer to each question.

The grades thus assigned are represented by the distribution charts in Figs. 1, 2, and 3. The scheme of these charts is self-

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evident. The range of marks is indicated along the base line and the number of times each grade was given is indicated by the number of dots above that grade. Thus in Fig. 1 the grade 70 was assigned by 5 teachers. The marks assigned by 10 schools whose passing grade is 80 are 72, 80, 83, 80, 58, 50, 50, 75, 73, 70.

Fig. 1 gives the values assigned by 43 teachers in schools whose passing grade is 70. Fig. 2 gives the values assigned by 75 teachers in schools whose passing grade is 75. The median indicates the central measure. It is roughly, but not exactly, equivalent to the average. It is used here in preference to the average because it represents more correctly the central tendency than the average would. The probable error is roughly, though not exactly, equivalent to the average amount of error or deviation of the mark from the median.

Fig. 3 is a composite chart showing the values assigned by the entire group of teachers. The values assigned by the teachers in schools whose passing grade is 75 are represented as in Fig. 1, while the values assigned by the teachers in schools whose passing grade is 70 are all weighted by three points because the medians of the two groups differ by that amount.

The investigation shows the extremely wide variation of the grades even more forcibly than our study of English marks. The distribution considered purely from the statistical standpoint is a normal distribution just like that of any set of mental or physical measurements. But the alarming fact is the wide range of the distribution.

A geometry paper was used because of the current assumption that a mathematical paper can be graded with mathematical precision. Our investigation shows that the marks of this particular geometry paper vary even more widely than the marks of either English paper used in the former study. The probable error of the geometry marks is 7.5 (Fig. 3), whereas the probable error of the English papers was 4.0 and 4.8 respectively.

A little analysis, however, will show the absurdity of assuming greater precision in evaluating a mathematical paper than in evaluating a language or any other kind of paper. While it is true that there can be no difference of opinion as to the correctness of a

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demonstration, yet there are countless ways in which the demonstration may be worked out, involving the succession of the steps, the use of theorems and definitions, the neatness of the drawings, and most of all the relative value of each particular demonstration or definition in the evaluation of the paper as a whole. Obviously the complication of factors is as intricate in one sort of paper as in another.

Why the marks of this particular paper vary even more widely than those of the English papers is to be sought in the fact that this geometry paper allowed of two fairly distinct ways of evaluation. The form, make-up, and appearance of the paper were of decidedly poor quality. Some teachers entirely disregarded these elements while others imposed a heavy penalty upon the paper on their account. In many instances this was indicated by the comments on the papers. But even this difference in viewpoint alone does not explain the extremely high or extremely low marks. For example, one teacher gave the paper a mark of 50 and said that he had deducted 4 points for spelling. Another marked it 45 and stated that he had made no deduction for poor form. Still another one marked it 75 including a penalty for form, or 85 excluding a penalty for form. Furthermore the amount that was subtracted for careless make-up ranged from 3 points in the case of one teacher to 13 points in the case of another.

It is therefore fully evident that there is no inherent reason why a mathematical paper should be capable of more precise evaluation than any other kind of paper. In fact, the greater certainty of correctness or incorrectness of a mathematical demonstration or definition may even contribute slightly to the wider variability of the marks, because the strict marker would have less occasion to give the pupil the benefit of the doubt.

In the next place, the criticism might be offered that the wide variation of the marks is due to the fact that the paper was graded by schools scattered over a large area, each one having a different standard of attainment. A propos of this point we may note that the school from which the paper was obtained has five teachers of geometry, each of whom graded the paper independently as follows: 70, 65, 60, 70, and 59, average 64.8, mean variation 4.2.

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In a large high school in Ohio the paper was graded by four teachers of geometry as follows: 76, 75, 67, and 61, average 69.8, mean variation 5.8. In both of these schools the passing grade is 70.

Finally we may raise the question: How much variation is there in the marks assigned to the answer of any individual question? Sixty-two of the returns contained marks for the answer to each separate question. Forty-nine were graded on a scale of 0 to 12½, and thirteen on a scale of 0 to 10. The marks of the latter given to

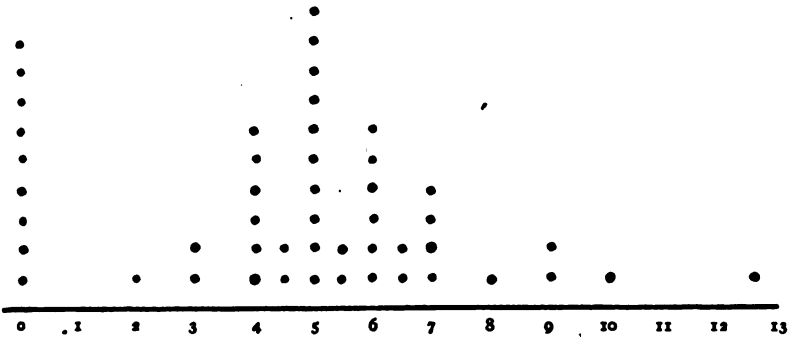

FIG. 4.—Grades of answer to question ten. Median 5.1. Probable error 1.1

the answer for question ten, which is reproduced at the beginning of this paper, were as follows: 5, 5, 0, 0, 5, 3, 4, 2, 3, 2, 5, 6½, 5, average 3.5, mean variation 1.7.

Fig. 4 exhibits the distribution of the values assigned to the answer for question ten by the 49 teachers who graded on the scale of 0 to 12½. The median is 5.1 and the probable error is 1.1. If we transpose this probable error into terms of the usual scale of 0 to 100 by multiplying it by 8, we obtain a probable error of 8.8. This is nearly the same as the probable error of all the marks in Fig. 3, namely 7.5. Hence we see that the marks of the answer for a single question of the paper vary about as widely as those of the entire paper.

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DISCUSSION

COMMENCEMENT PROGRAMS

High schools, in modeling their commencement programs after the colleges, have made of them merely aimless exhibitions. We are often deceived by the attendance into believing that these exhibitions are enjoyed. It is personal interest in the graduates, not delight in the program, that brings the crowd. It is doubtful if anyone more distant than a first cousin of the speaker ever really enjoyed a high-school boy's commencement "oration."

Just why commencement should be marked by a flourish of amateurish oratory has never been shown. If such a demonstration does seem to be desirable, it is still not clear why we ought to select for its execution those students who have ranked highest in mathematics, chemistry, Latin, and zoölogy. Yet in a majority of cases it is "good grades" that fill the positions on the commencement stage.

What ordinarily occurs in preparation for these commencement programs is familiar to every high-school teacher who has had to do with their creation. The honored, but usually unhappy, student searches his memory and the files of old commencement programs for a suitable subject. He seizes upon one which has a euphonious ring, or upon one which he sees is well covered in the reader's guide, or perhaps upon one in which his high-school work has given him a decided interest and even a little knowledge.

Assiduous application to references and even more assiduous quotation (not always acknowledged) eventually result in the production of the "oration" or the "essay." As this is probably the first piece of literature of this specific character which the student has ever written, it will probably need more or less editing. This is done by some teacher, to a degree varying with her regard for the pupil or the publicity which is to be given the fact that it is in part her handiwork.

When in glancing at random through old commencement programs one encounters "The Race Problem," "Competition," "The Immigration Question," "The Cross or the Crescent," "The Ideal Successful Career," "World Peace," and "Nihil Sine Labore," and contemplates what the average high-school Senior of seventeen or eighteen must have said upon them, one wonders that commencement programs of this character have remained so long extant.

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But without attempting any quarrel with the old custom of "speaking" at commencement, or with whatever method may be used in choosing the speakers, there are, it would seem, three elements in the average program which, from the standpoint of accomplishment, contribute to its failure. First, the student has usually only a meager comprehension of the subject which he presents; second, the audience has only an indirect interest in the question presented, and no interest in a juvenile discussion of it; and third, whatever idea the student originally had as to what constitutes effective speaking has either been stimulated into intoxication or sandbagged into inanity by the staggering announcement that he is to produce an "oration."

In an effort to evade these errors, the Joliet Township High School last year tried something new in commencement programs. We set down three things as essential: First, the speakers should talk on something which they understood; on something concerning which they could speak without reference to sources other than their own knowledge; and on something concerning which they knew more than the audience to whom they were speaking. Second, the speakers should not be impressed with the idea that they were preparing a formal address. Third, the talk should have a direct interest to, and therefore be capable of producing a direct effect upon, this audience. It was decided that most of the "coaching" should be done in giving the speakers a start in the right direction rather than in revision of the manuscripts, and that in such revision as was made, there should be an effort to make the composition have as local and personal an appeal as possible. As a result, the determination was reached that the commencement speakers should all deal with those phases of high-school life of which the audience would know, or would have thought, very little. This idea had the additional advantage that the entire program could be unified under the one title "Products and By-Products of High-School Life." How this idea was worked out can best be shown by the program which was given. Under the general heading given above came the "Salutatory." This, which was really little more than an introduction to the remainder of the program, began with these words:

Mr. Chairman and People of Joliet:

This high school is your school. As the taxpayers of the township of Joliet, you are the shareholders of this institution. In coming here tonight you come not merely as friends and visitors, you come as *owners*.

Upon former occasions similar to this it has been customary for the commencement speakers to attempt the discussion of questions of national and even world-wide importance.

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Tonight we shall refrain from every such effort and shall try simply to render to you an account of some of the things which your high school is doing for us. The direct results of many lines of our work are already known to you; these we shall take for granted and dwell now upon some of the less conspicuous benefits connected with the various branches of our school activity. If, when we have finished, you shall feel that you know this school better; that you have a more complete knowledge of the dividends in trained boys and girls which your investment here is producing, we shall be satisfied that our commencement program has been a success. We shall have done the best thing that we can do—shown you our appreciation of the splendid high school which you have made it possible for us to attend.

The themes of the other speakers were as follows: "This High School as an Americanizer"; "Effect of Teachers upon the Student"; "Development from Physical Education in High School"; "The Desirability of a Knowledge of Chemistry"; "Some Practical Values of History and Literature"; "The Social Training of Our High-School Course"; "The Moral Lessons of High-School Work."

LEVERETT S. LYON

TOWNSHIP HIGH SCHOOL
Joliet, Ill.

To the Editor of the "School Review":

SIR: I have seen the review of my little *Short Stories for Oral French* in your January number. I sincerely welcome criticism of my book, but your reviewer has some misconceptions of its purpose. My *Oral French* has no connection with the series of French books which the Messrs. Scribner have announced. It is just a little waif all alone by itself, to help the teachers and the pupils who need it to do and love good oral work.

I thought the title *Oral French* was sufficiently explanatory in itself to make the purpose of the book clear. With my own classes I spend fifteen minutes the first day, ten the next, and five or six the next on one of the stories. When I covered twenty stories with a beginning class in Horace Mann High School, it was *additional oral* work "tacked on to" the regular, already heavy, course, and done gladly by my pupils because they loved it.

Oral French has no object but what the preface states, it has nothing to do with German methods or reform methods. It simply shows what has been completely successful for three years running in an American high school with classes of twenty boys and girls. It seems to work just as well in Teachers College in larger classes of older pupils.

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When much work in translation is required, it is simply impossible to "treat it orally." Whatever *is* treated orally must be completely treated—and should lead to written work.

I think *Oral French* has enough material for two years' work at least. When it is completed, pupils have a good vocabulary and can use it in an animated way. I did think of adding "stories without questions," but most texts for reading have these. When any class is ready to graduate from *Oral French*, let it do so. When the wings can carry the birds, they fly—the earlier the better if the wings are strong enough to bear them up.

As to the "only grammatical topic treated"—the hard thing in French is the irregular verb. There *are* three conjugations in French—and irregular verbs. I tell my pupils at once that there *are* irregular verbs. I really *do* tell them the truth, but gradually, as they are able to bear it. May I say that by this method my beginners have at the end of their first year a very complete mastery of the French irregular verb, not excluding the dire subjunctive mood?

As to the vocabulary—your reviewer is very merciful; there are much worse things than he found, but I believe that they have all been changed for the second edition.

Your reviewer is right—it *is* hard to make a French-French vocabulary at once correct and simple. You see even two Frenchmen have found it so.

ANNA WOODS BALLARD

TEACHERS COLLEGE
February 25

A CORRECTION

To the Editor of the "School Review":

SIR: In my article on "The Second Year of a Modern Language," in the January number of the *School Review*, the peculiarity of the South German speech which makes *gehen* sound like *kehen* and *kehren* like *gehren* was erroneously described as "the tendency to make all stops into spirants and all spirants into stops" (p. 36, ll. 26, 27). The phrase should have been, "the failure to distinguish between voiced and voiceless stops."

WILLIAM R. PRICE

STATE DEPARTMENT OF EDUCATION
ALBANY, N.Y.

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EDUCATIONAL NEWS AND EDITORIAL COMMENT

COLLEGE TEACHERS OF EDUCATION

The Society held two sessions and a luncheon in Philadelphia on Monday, February 24. At the sessions the papers were discussed as usual, except that Professors Meriam and Jones were not present to present their papers. Professor F. E. Thompson presented his views on "The Placing and Promotion of Teachers" at the afternoon session. An abstract of this and other discussions will appear in the May number of the *School Review*.

The usual luncheon was held at noon of this day in the Walton. About sixty members were present, and all arrangements were admirably cared for by Professor Bird T. Baldwin, of Swarthmore.

The business meeting was held at the beginning of the afternoon session. The constitution was amended to conform to current practice in regard to dues and the size of the Executive Committee.

The treasurer's report in brief was as follows:

Receipts:			
From former treasurer		$ 42.45	
Collected on 1911 dues		42.85	
Collected on 1912 dues		208.15	
Collected on 1913 dues		216.00	
			$509.45
Expenditures:			
University of Chicago Press		$416.73	
Secretary's expenses—			
Stamps	$14.55		
Printing	12.50		
Telegrams	6.78		
Express	1.93		
		35.76	
Refunds to members		6.30	
			458.79
			50.66
Bills outstanding February 20 (about)			35.00
			15.00
Dues for 1913 not paid, but "good"			72.00
Potential assets			87.00

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On March 1, 1912, the Society owed about $250.00 and had less than $45.00 in the treasury. This state of affairs was due mainly to a misunderstanding on the part of many members in regard to the contract with the University of Chicago Press.

To facilitate the collection of dues, the secretary was instructed to render a bill for dues for the succeeding year on December 1; to render a second bill if necessary on January 1; to drop automatically, on February 1, all members not then paid up.

The following officers for 1913–14, as proposed by the nominating committee (Professors Judd, Hanus, and Sutton), were elected:

President, Professor George M. Forbes, Rochester University.

Secretary-Treasurer, Professor Carter Alexander, University of Missouri.

Member of the Executive Committee to succeed Professor F. E. Bolton, Professor F. E. Thompson, University of Colorado.

President James announced that he had been unable to get any members to undertake seriously the investigation into the rating of normal schools recommended at the 1912 meeting. He accordingly requested the Executive Committee for the next year to pay particular attention to this matter. He also urged them to consider the advisability of appointing another committee to study the placing and promotion of teachers and report at the next meeting of the Society.

Since the list of members was published in the February *School Review*, the following have been added:

Adams, Elizabeth K., Professor of Education, Smith College, Northampton, Mass.

Ayer, F. C., Head of Department of Education, University of Oregon, Eugene, Ore.

Bell, J. Carleton, Chairman of School of Art of Teaching, University of Texas, Austin, Tex.

Elliff, J. D., Professor of High School Administration and High School Visitor, University of Missouri, Columbia, Mo.

Fant, Anna L., Professor of Education, Mississippi Industrial College, Columbus, Miss.

Gard, W. L., Professor of History and Principles of Education, Ohio University, Athens, Ohio.

Heckman, Samuel B., College of the City of New York, New York.

Hillegas, Milo B., Assistant Professor of Elementary Education, Columbia University, New York.

Jessup, W. A., Director of School of Education, State University of Iowa, Iowa City, Iowa.

Kieran, James M., Professor of Education, Normal College, New York.

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Kilpatrick, William H., Assistant Professor of History of Education, Columbia University, New York.

Klapper, Paul, Instructor in Education, College of the City of New York.

Moore, L. B., Dean of Teachers College, Howard University, Washington, D.C.

Sheldon, H. D., Professor of History of Education, University of Pittsburgh, Pittsburgh, Pa.

Swift, Fletcher H., Professor of Education, University of Minnesota, Minneapolis, Minn.

CARTER ALEXANDER
Secretary College Teachers of Education

MEETING OF THE DEPARTMENT OF SUPERINTENDENCE

The most important educational gathering of the year is the winter meeting of the Department of Superintendence and its affiliated organizations, which assembled in Philadelphia during the last week of February. Among the affiliated organizations were the National Council, the Society of College Teachers of Education, the National Society for the Study of Education, the International Kindergarten Association, and a half-dozen other national societies and general committees. The discussions of these various bodies cannot be reported here. Two general comments on the significance of this meeting apply to all of the organizations.

First, this winter meeting has clearly outstripped all other meetings in importance. The summer meeting of the Association does not bring together as representative or influential a group of educators as does this meeting. The committees which report at this meeting are also of greater significance and influence in the aggregate than are the committees which report at the summer meeting. The total registration at Philadelphia was over two thousand five hundred, and there were a great many in attendance who were not formal members of the Association.

Second, the very striking emphasis in all of the meetings on discussions of a scientific type marks a great advance upon the informal, inspirational programs of a few years ago. Here and there a voice was raised in protest against the effort to measure educational products, but in the main there was the most cordial sympathy with scientific studies of every type. Even the protests were encouraging, both because they warn the scientific worker of the necessity of caution against overhasty generalization, and also because they show that even the reluctant are beginning to realize that the era of exact evaluations in education has arrived.

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WASTE IN FRESHMAN YEAR

In his annual report President Judson, of the University of Chicago, asserts that, because the first year of college duplicates to such a large extent the work of the high schools, the best thing to do with the Freshman year is to abolish it. He calls attention to the fact which has been pointed out in detail in the *Review* by Dean Angell that from 20 to 30 per cent of the work required in a four-year college course is of elementary grade. The distinction between elementary courses and advanced courses is exactly the distinction which should mark the transition from high-school work to college work, but at the present time this transition is not clearly made.

The following brief quotation will give a somewhat further view of President Judson's position:

> In the first years of the colleges, instruction is given for two full years in elementary French and in elementary German, and one full year in general history; to the extent of two-thirds of a year in English composition and literature; to the extent of one-quarter in political science; and also there is more or less elementary work in Latin, in physics, in chemistry, in mathematics, and in biology. The content of these courses is not different essentially from that of the same subjects as treated in the high-school classes.
>
> All of these things should be taught in the high school, and it is difficult to see any adequate reason for requiring five years instead of four years of high-school instruction.
>
> The average student is by no means deficient in intellectual acumen. He generally forms a fairly accurate judgment as to what is worth while and what is not worth while, and I strongly suspect that the dissipation of energy which marks the early years of the college course is not something which results primarily from the innate pernicious qualities of Freshmen, but that it comes more likely from an irrational requirement by college authorities.
>
> In other words, on entering college the student should find that he is studying advanced subjects in a new way, treated seriously, and yielding results which he at once realizes to be of importance to himself.

STATE BOARD OF ADMINISTRATION FOR KANSAS

Kansas is to have a salaried educational governing board of three members appointed by the Governor. This board of three has appropriated for its use during the biennial period ending June 30, 1915, the sum of $41,000.00 for salaries and expenses of its members, and for the payment of its secretary and office employees. Each member is to receive a salary of $3,500 and all traveling expenses. The board is called the State Board of Administration and is created to govern the

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State University, State Agricultural College, the three State Normal Schools, the State School for the Deaf, and the State School for the Blind. Not more than two members can belong to the same political party, not more than one shall be an alumnus of any one of the institutions concerned, and not more than one can be chosen from one congressional district.

The bill, which is now a law, was incorporated in both the party platforms of last fall. It is the most radical departure in university administration. Even the Iowa plan retains some of the features of individual boards for the different institutions, and allows for a measure of administration individually for each institution by selecting the smaller salaried board from the existing separate boards of regents (most of whom serve without pay) for each institution.

The popularity of the bill rests on the apparently general belief that such a board will be able to save money without hurting the institutions. The former State Commission of Higher Education (the associated boards of regents of the different state institutions of higher education) proposed the only substitute for the above measure which met with anything like serious consideration. This was a plan of consolidation of governing bodies in many respects similar to the one in Iowa.

The powers of the Kansas Single Board are sweeping. The members are required explicitly by statute to devote their entire time to the duties of the board, must attend each institution for a period each month, maintain offices at each institution, and are ineligible to hold any other appointive or elective office.

C. H. JOHNSTON

EXAMINATIONS AND HOME STUDY

A news item from Marion, Ohio, states that the Board of Education adopted a sweeping resolution eliminating all examinations save those at graduation. The statement goes on to set forth the fact that pupils are overworked, and that many examinations, all of which are useless, are the real cause of this difficulty. One of the members of the board arose to say that he was not in sympathy with the present school system which compelled boys and girls to work nine and ten hours a day while the government and the state had provided laws for men and women making it impossible for them to be engaged more than eight hours a day in labor.

One looks forward with interest to the operations of the resolution passed by the Board of Education in Marion, Ohio. Evidently the

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board feels that examinations at the time of graduation are either necessary or have some justification. Would it not, on the whole, be merciful to the students in that school if they could be prepared for these final examinations by a few rehearsals during the course? President Walker of the Massachusetts Institute of Technology used to call attention to the fact that life is a succession of examinations. The lawyer is examined when he presents his brief; the business man is examined when he presents to his colleagues a project which he has formulated; the preacher is examined by his audiences whenever he preaches a sermon; the housekeeper is examined by her guests whenever they come upon her suddenly and tax her powers of entertainment. In many of these cases the practical examination involves all of the features of a test of the individual's ability "to cram up" for the special occasion. The worst possible charges that can be made against an examination must therefore be faced with some recognition of the fact that a school examination is hardly more than one phase of the preparation for life.

But not to enter into a dispute on the matter of examinations with the school board of Marion, one notes with interest the final statement that high-school pupils in that city work nine to ten hours a day. This is certainly a unique situation in American education. Marion, Ohio, ought to look forward with satisfaction to the intellectual prodigies which will be produced by this arduous attention to intellectual matters. Most institutions have to be satisfied with a very much smaller portion of the high-school student's day for strictly scholastic engagements.

ENDOWMENT FOR EDUCATIONAL STUDIES

The Carnegie Foundation has received from Mr. Carnegie for the purpose of conducting educational researches a fund of $1,250,000. The income of this fund will be free from the obligations which attach to the pension endowment and will be devoted to such studies as the Foundation has in times past conducted in its investigation of medical schools.

SELF-GOVERNMENT IN HIGH SCHOOLS

The following news item from Nevada City calls attention to another experiment of the type which has become relatively familiar in American schools.

The system of student government adopted in the high school of this city has worked wonders, and it will be continued indefinitely as long as it works successfully. Heretofore it was necessary for a teacher always to remain with a class, even during a study period, but now the class is divided up into smaller

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classes and the teachers are able to accomplish a great deal more. The student court consists of a president and two representatives from each class, and they decide what punishment shall be meted out to those who do not behave, and they see that the punishment is inflicted. The system has done a great deal to preserve order, and putting the students on their honor seems to be pleasing to the large majority of them.

Such experiments always begin with great enthusiasm. One wonders why the practice of student-government has not become universal if the enthusiasm is justified in each of these particular centers. The answer is probably to be found in the fact that we have not had equally complete reports of the termination of some of the experiments. There can be no doubt that it would be very advantageous for some student of self-government to make a careful analysis of the failures of such experiments where they have not been successful, in order that the difficulties as well as the advantages of such self-government may become matters of common knowledge. We have learned much about public health by the study of diseases. Everyone assents in the abstract to the desirability of self-government by high-school students, and yet the balance of practice is distinctly on the side of skepticism.

STUDENT RECORDS

The problem of securing suitable records for individual students in a school is commanding at the present time much serious discussion. Such records usually have the defect of being so brief and summary in character that they do not represent adequately the pupil's achievement and do not constitute a safe guide for the further adjustment of his school work.

There is also a competitive element in most types of school records. The student is graded with regard to his relative position in a class made up of a large number of other students. The following blank is used by the Liggett School of Detroit in recording the work of its students. This blank is filled out for each individual and serves first to give a large body of detailed information with regard to the pupil's work. Second, it permits a comparison of the pupil with himself, rather than with other members of the class. Such a report is filed in the principal's office every two months and is made the basis of conferences and interviews with the pupil and his parents.

A somewhat different blank is used in sending notices to parents. This blank contains the following statement by way of explanation of the record. "Our system of reports is based on the conviction that a

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teacher's judicious recognition of success and failure, of cause and effect, of effort and achievement, is helpful to the workers. So far as possible we wish to destroy the habit of competition with others and establish a true conception of the value of self-management." This home report then gives for each study taken by the pupil a statement of the pupil's achievement, preparation, attitude, deportment, and attendance. The

YEAR MONTHS OF SEPT. AND OCT. NAME

STUDY GRADE INSTRUCTOR

A.—GENERAL SUMMARY

ACHIEVEMENT	EFFORT	ATTITUDE	INCLUDED IN THIS REPORT	
			NO. LESSONS	INTERVIEWS
			ABSENCE	MARK UP

B.—DAILY WORK IN EXPLANATION OF ABOVE

CLASS WORK			WRITTEN WORK	
PREPARATION	ATTENTION	DEPORTMENT	PROMPTNESS	FORM

HABITS			IMPROVEMENT	
OF STUDY	ATTACK	CORRECTION	SHOWN IN DAILY WORK	SHOWN IN TESTS

filing and handling of these reports involves somewhat more labor than is represented in conventional pupils' reports. There can be no question, however, as to the wisdom of enlarging school reports and this elaborate example may serve to stimulate the adoption of similar plans elsewhere.

SHALL WE HAVE SEPARATE INDUSTRIAL SCHOOLS?

The secretary of the National Society for the Promotion of Industrial Education has issued a pamphlet which is entitled *Principles and Policies That Should Underlie State Legislation for a State System of Vocational Education*. The preamble to the statement of principles sets forth the fact that this is "a tentative statement of principles and policies formulated at the meeting of a committee of the National Society for the Promotion of Industrial Education, in annual convention, at Philadelphia, December, 1912, and approved by the board of managers of the Society, February, 1913."

In the middle of this pamphlet there are several paragraphs which

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seem to the present writer to deserve more than passing notice. These are paragraphs 27 to 30, which are here reprinted for the purpose of drawing attention to them and to the importance of the National Society which is committed to this educational program.

27. *Separation of vocational and general education.*—For these reasons, whether administered by regular public school authorities or a separate board of control, and whether conducted in a separate building or under the same roof as the regular school, the work in vocational education should be carried on separately and independently from that of general education, so that it may be left free to realize the dominant aim of fitting for useful employment. This requires a separate organization, under a separate head or a distinctive management, and separate equipment, course of study, pupils, and teachers who shall have had extended practical experience in the industries or occupations they are employed to teach.

28. *Separate schools best.*—Experience seems to prove that where conditions admit, this work can be best prosecuted in separate schools, whether under the control of the regular board of education or otherwise.

29. *Cities of more than 25,000 inhabitants* should probably be required to meet the need of vocational education by separate schools rather than in departments of regular schools.

30. *Separateness and dominance of vocational aim.*—Should the state desire to give aid to vocational departments in the regular schools, such a department should be defined in the law as a department having a separate head or director who should be treated as an expert in dealing with the problem of vocational education, and having separate organization of classes, teachers, and courses of study, and separate facilities for carrying on shopwork. The academic work should be such as meets the needs of the pupils of this department, and be subject to the approval of the state board of control as a condition of state aid.

It will be noticed that in paragraph 28 the statement is made that experience seems to prove that where conditions admit this work can best be prosecuted in separate schools. The *Elementary School Teacher* presented in the February issue a paper by Professor Roman which defended for Germany exactly the opposite thesis. The experience of New York state is directly opposed to this statement. The judgment of the Indiana commission contradicts what is here said. It has appeared in the discussion carried on in the state of Illinois that there is a very large degree of unanimity among educators that a separate school system is not the best way to deal with this problem. In the face of all the facts it is certainly important to draw attention to the formulated policy of the National Society for the Promotion of Industrial Education and to secure if possible a wide discussion of these principles by American teachers.

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In this connection it is certainly not out of place to call attention to the organization which has sent out these principles and to emphasize the fact that the separation of this organization from the general body of educational organizations is a distinct misfortune. It is not easily possible for superintendents and others who are vitally interested in industrial education to be present at the separate meetings of this Society and without them there is danger that the Society will fail to discuss sympathetically the problems of the elementary school. It is not strange that this separate, isolated organization should reach a solution which is in keeping with its own character and in keeping with the lack on the part of some of its members of intimate connection with the public school. In the meantime it must be obvious to anyone who follows the discussion of industrial education in this country that it will be a great misfortune if a breach is created, such as is advocated in the pamphlet from which quotation is made above.

ORGANIZATIONS OF TEACHERS

At the recent meeting of the National Council in Philadelphia Professor Suzzallo, of Columbia University, presented in elaborate detail a plan for the more complete organization of teachers throughout the United States. Professor Suzzallo's presentation began by pointing out the necessity of emphasizing professional rather than economic interests in the future development of American teachers' associations. He defined the nature of a profession. He then advocated the formation of small local teachers' guilds, these to be federated in the larger county and state organizations. From these larger federations representatives should be sent to a national gathering where the interests of all of the teachers of the country can be adequately discussed and formulated. Some of the advantages and difficulties to be expected from such a federated organization were pointed out by Professor Suzzallo and the speakers who followed him on the program.

A committee was appointed to consider carefully the possibilities of making effective the suggestions thus presented. The committee consists of the following persons who will be interested to hear from anyone who is willing to make suggestions or make comments upon the plans: Miss Blake, of New York City; Mr. Downing, of New York; Mr. Snedden, of Massachusetts; Professor Bolton, of Oregon; President Kirk, of Missouri; Mr. Meek, of Idaho; and Mr. Judd, of Chicago (chairman).

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NATIONAL EDUCATION ASSOCIATION

Official announcement was made at the Philadelphia meeting that the National Education Association will be held in Salt Lake City from July 7 to July 11. The general plan which is in view for the Association is an eastern meeting in 1914 and a meeting in California in connection with the Panama Exposition in 1915.

LENGTHENING THE SCHOOL YEAR

The question has come up in the city of Boston of lengthening the school year. A good deal of local discussion followed upon the consideration of this question. The following editorial comment from the *Boston Journal* is selected from the numerous discussions which were printed on this topic because it presents clearly and concisely a very important series of considerations which must be kept in mind whenever the problem of lengthening the school year is taken up.

Aside from this fact, do our people realize that American school children do not work nearly as long or as hard as children of other countries, notably Germany? Do they realize that, at best, our children get a very meager training for life and effective usefulness? Do they realize that the industrial future and hence the happiness of these very children is bound up in the training they get in the schools and that the more they get the better fitted for life they will be?

A part of the complaint against the public schools is due to the fact that they do not have a fair opportunity with the frequent interruptions and holidays to teach concentration and continuous hard work, both of which are prime necessities to capable service in later life. A longer term is almost a necessity. On the score of the welfare of the children themselves, it is absolutely imperative. Particularly is this true of the children who are early compelled to leave school and go to work.

YALE ENTRANCE EXAMINATIONS

The following item is clipped from the *Boston Transcript* of February 28:

In response to the widespread demands of the preparatory schools that Yale's requirements for admission be modified, the most sweeping changes made since the college became a university have been recommended by the joint committee of members of the faculties of the two undergraduate departments, the academic and the Sheffield Scientific School.

The report is ready for confirmation by the two faculties in question and no doubt is felt that it will be ratified and will be a part of the entrance requirement scheme in 1914. The concessions made by Yale to the demands of the

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secondary schools assure a marked amount of elasticity, but no mention is made in them of vocational studies, further than that an extra course in history and in science be added to the entrance requirements.

In three respects, however, elasticity is gained, and, according to Dean Frederick S. Jones, of the academic department, who announces the report in the *Yale Alumni Weekly* today, any serious, earnest boy who is a graduate of a good high school should find it easy to enter Yale.

The elasticity in judging examination papers is indicated in the clause of the report that allows strength in one subject to bolster weakness in another. Suppose a candidate deficient in Vergil, but strong in Cicero. He will be passed in Latin. Suppose him strong in algebra, but weak in geometry. He will be given credit in mathematics. The school record of a candidate will hereafter be received and will count for a specific amount of credit in the entrance tests, although certificates from high schools will not be allowed to enter candidates.

Another broad rule laid down is that which allows a first-rate student, recommended by a first-class principal, to be given liberal treatment, even though he may not have pursued the exact course outlined in the printed requirements.

Speaking of Yale's determination not to accept the certificate system, Dean Jones says: "All the suggestions of the school men have been met, with the possible exception of the proposal that Yale accept the certificate system of admission. We have not yet reached that point and I am free to say that I am not a believer in the certificate system. Examinations seem to be growing in all directions except for admission to college—throughout the Government service, for admission to West Point or Annapolis; and in many of our leading commercial and industrial organizations, examinations are considered the best test of a candidate's fitness.

The four general changes which the joint committee recommends and will lay before the preparatory schools of the country as Yale's answer to the demands recently made upon her are as follows:

1. That the question papers in each subject shall be prepared by a committee consisting of the examiners of the two undergraduate departments. These papers shall be submitted for criticism and revision to the official representatives of the secondary schools.

2. That examinations shall be fewer in number and of a more general character. It is the opinion of the joint committee that as far as feasible examination papers should be prepared and examined in such a way as to test the general fitness of a candidate in the whole of a subject rather than in parts more or less arbitrarily fixed. It seems best to reduce, as far as practicable, the number of examinations by combining question papers in similar or closely related subjects. Moreover, it is believed that entrance credits should be regulated by the principle that a uniform standard of scholarship in each of the

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subjects required for admission should not be insisted upon, provided the candidate has attained a sufficiently high average in the requirements as a whole.

3. That the candidate or his principal instructor may submit at the time of his final examination an official record, indicating his scholarship grades in each subject pursued during his course of preparatory study. This record will be given careful consideration in judging of the candidate's fitness for admission.

4. That the committee on admission consider the application made by a school principal in behalf of a final candidate who during his preparatory course has shown unusual ability and maintained a high grade of scholarship, but whose subjects of study have differed somewhat from those prescribed for admission to the undergraduate departments of Yale University.

EDUCATIONAL LEGISLATION

The legislatures of forty-five states and territories will meet in regular session in 1913. A large number of educational bills have already been introduced in these legislatures. The bureau of education distributes a series of circulars giving the titles of all of these bills. It may be of interest to note briefly some of the unique items and some of the items that recur in the different legislatures indicating the widespread interest in certain phases of educational organization.

A number of the bills introduced relate to pensions for teachers. Such bills are before the legislatures of Maine, Massachusetts, North Dakota, Pennsylvania, Iowa, and Connecticut.

A number of the states are enlarging the high schools, either by creating county agricultural high schools or by providing for the standardization and support of high schools, in several cases requiring all districts in the state to pay the tuition of students. Such legislation is now being considered in Iowa, Massachusetts, Tennessee, West Virginia, and Maine.

A number of states are considering the matter of uniform textbooks. This is true of Missouri, North Dakota, Indiana, and Oregon.

Among the interesting items which are noted in single states are the following: A bill has been introduced in the Missouri legislature creating an educational investigating commission. In Rhode Island a bill has been introduced to secure the continuous conducting of public schools. In Montana a new school code is presented by a commission which was created in 1911. In Nebraska a bill is introduced providing that modern languages shall be taught in the elementary schools. In Oregon there is a bill requiring correspondence schools to furnish proof of efficiency. In West Virginia a bill has been introduced excusing high-school teachers from attendance at county institutes.

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BOOK REVIEWS

A Report on Vocational Training in Chicago and in Other Cities. By GEORGE H. MEAD, ERNEST A. WREIDT, and WILLIAM J. BOGAN, Subcommittee of the Committee on Education, 1910–11, of the City Club of Chicago. Published by the City Club of Chicago, 1912. Pp. xiii+315.

In the first of the four sections of this important and well-written report, the subcommittee first summarize the social and educational condition of the community in relation to the problem of vocational training. This is followed by their general recommendation as to the constructive measures that appear necessary in meeting the various needs of the situation. Some of the things for which they present detailed recommendations are: two-year elementary vocational schools for grammar-grade pupils; elementary industrial schools for over-age children who are below the seventh grade; optional industrial and commercial courses for grammar grades; trade schools for boys and girls, apprentice schools, day continuation schools, technical trade and commercial courses in the high schools, part-time co-operative courses in connection with the technical high schools, and a central high school of commerce, for the adolescent years of education.

The second part of the volume discusses industrial education as it now exists in Chicago and in other cities. In the beginning a careful study is made of the industrial needs of this particular city, showing the large amount of elimination due, perhaps in chief measure, to a vocationally defective curriculum, and showing the effects of the "wasted years." Attention is given to the conditions in the skilled industries of the city, the attitude of the employers, and the general educational needs of the situation. The results of questionnaire studies made as to the attitude of organized labor in Chicago and in other cities are also presented. This is followed by very full discussion of industrial schools and courses in Chicago and in other cities throughout the country for purposes of comparison. Especially valuable are the detailed courses of study presented in connection with very many of these industrial schools. These curricula better than almost anything else show the nature of the changes that are being made in the form of organization of educational materials so as to adapt the work of our schools for actual community service. The courses of study presented show a method of organizing materials that are related to community needs which can be carried over into the work of organizing curricula for civics, hygiene, social, recreational, and moral training as well.

The third section of the volume discusses commercial education in Chicago and other American cities. Outside of professional training this is the most

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fully developed form of vocational training in both public and private schools; yet, strangely enough, it is the department of vocational training that has as yet only a limited literature. Most discussions of vocational education are confined to industrial phases of the subject; if made more inclusive it is extended to household education and agricultural education. This report departs from the usual practice in giving a full section to a discussion of all the various aspects of commercial education.

The fourth section of the report gives the result of a full series of tests made upon boys who had left school to go to work as soon as the law permitted, regardless of their advancement in the school. With reference to their ability to solve simple problems in arithmetic, to understand and write simple English, and with reference to their knowledge of simple matters of civil government and history, the tests show that the boys are very deficient in these various lines of work. The tests seem to show that, in the case of boys who leave school at the age of fourteen, what has been learned is in large measure so completely forgotten that much or most of the educational labor has been wasted. They present another argument among the others already in the field for an upward extension of the compulsory school age.

The volume is one that should be placed at public expense in the hands of every teacher, supervisor, and other educational worker in the city of Chicago, with the further requirement that it be read and discussed in full. Since it is the type of study that should be made for every city for its own purposes, and since it is comparative of the work of different cities, and draws its suggestions from experiments in all portions of the country, the volume is one that ought to be widely read wherever problems of vocational training are being discussed.

Examples of Industrial Education. By FRANK MITCHELL LEAVITT. Boston: Ginn & Co., 1912. Pp. viii+330. $1.25.

The volume deals with the many problems incident to the development of adequate systems of industrial education. It discusses in the beginning the larger relationships of the vocational movement, the various social demands and social needs. It then devotes several chapters to the specific demands for industrial education now being voiced by various social classes: the demand from the manufacturers; the demand from organized labor; the demands of educators; and the demands of social workers.

It discusses the revision of educational ideals, practices, and forms of organization that appear necessary as we include these newer aspects of education into an integrally organized public-school curriculum. It suggests plans that may be suitable for immediate reorganization since they require the fewest possible changes. It then gives a number of examples of the more fundamental forms of reorganization of the general educational program such as found in the progressive work of Cleveland, Menominee, Berkeley, Concord, Portland, Gary, and Chicago.

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After clearing up these general matters, the book centers attention upon the various stages of vocational training and the various types of schools, to each of which is devoted a chapter. The method in each case is to present one or more actual concrete examples of the type of school in question, showing the form of organization, the relation of the work to the other portions of the school system, the content of the curriculum, both technical and practical; and in some cases the training of the teachers that appears most desirable for the work. As types of pre-vocational work in grades six to eight, the author describes the Agassiz School in Boston, the Cleveland Elementary Industrial School, and more briefly certain others in Pittsburgh, Los Angeles, and Seattle. Of the intermediate or separate industrial schools for children twelve to sixteen years of age, he describes the Rochester Shop-School very fully, and in briefer compass the Manhattan Trade-School for Girls and the secondary industrial schools of Columbus, Georgia. Of vocational high schools the example given is the Lane Technical High School of Chicago. As types of the trade school, he discusses the Milwaukee schools of trades for boys and girls, the David Rankin School of Trades in St. Louis, and the Worcester Trade School. The part-time co-operative schools described are those of Cincinnati, Fitchburg, and Beverly. Among the continuation schools discussed are those of Cincinnati, Cleveland, and Boston.

The chapter on vocational guidance deals with the problem of guiding a boy into those lines of vocational training for which he is best fitted by his natural aptitudes and his opportunities. The examples of actual work most fully described are those of Boston and Grand Rapids. The excellent lists of books for high-school reading in connection with the discussion of vocational guidance drawn up by the Grand Rapids public library in co-operation with the school authorities are reproduced in full. Only slight attention is given to the problems of vocational placement of the graduates of the vocational schools, a matter sometimes referred to as vocational guidance.

The final chapter is devoted to a discussion of the problems of agricultural education. The types of work discussed are those of England, Germany, France, and various American states.

The volume gives a fairly unified picture of conditions as they exist in the United States at the present moment. The field of industrial education is one in which there has arisen with surprising rapidity a tremendous ephemeral literature. Most of it deals with partial aspects of the problem and it is of a highly repetitious character. For the rank and file of the profession who need to obtain a clear view of the total situation from only a moderate amount of reading, the book is a very welcome contribution.

Vocational Education in Europe. By EDWIN G. COOLEY. Published by the Commercial Club of Chicago, 1912. Pp. 347. $1.10.

In this volume Mr. Cooley presents a discussion of vocational education in Germany similar in plan to that of Professor Leavitt's discussion of American

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education. The treatment is not geographically so extensive as might be inferred from the title; it does not include the work of France, England, or Scotland. Except for three chapters devoted to Austria and Switzerland, the study is confined to Germany. A more accurate title for the book would probably be "Industrial Education in the German States."

The general introduction is devoted to a comparison of German industrial efficiency with that of France, England, and the United States for the purpose of showing the value of systematic and consistent industrial training. By means of well-chosen quotations from Dawson, Barker, North, Miles, Carver, and Reynolds, he shows that Germany in fair competition has easily outdistanced the field against heavy odds, chiefly because she has trained her workers for productive efficiency.

Chapter ii is given to a general "Survey of Vocational Education in Germany." Here are enumerated the classes and grades of vocational schools, and some explanation is made of the administrative organization and relationships. The next chapter discusses the position of the apprenticeship system in Germany at the present time and its relation to vocational education. This is followed by a brief outline of the "School System of Germany" in which the whole scheme of German public education is drawn for the purpose of showing the position in the program of the various vocational schools. Chap. v treats extensively the position of the continuation schools, their aim, mode of organization, management, support, supervision, and their curriculum. Special attention is given to the continuation schools of Munich. At the end of the chapter is a statistical appendix which presents full arrays of figures which clearly show the general situation as regards the continuation schools. Other topics covered in rather brief but satisfactory manner are: vocational guidance, which here refers not to the guiding of the boy into the vocation for which he is best suited, but rather to the finding of places for the boys after their training is finished; secondary technical schools, which train the subaltern officials and the skilled rank and file; building-trades schools; machine-trades schools; art-trade schools; textile schools; the technical universities, which provide the captains of industry; the training of independent handicraftsmen; commercial schools; industrial schools for girls; the training of vocational teachers; agricultural education; industrial education in Austria; commercial education in Austria; industrial education in Switzerland.

In the final chapter Mr. Cooley draws some general conclusions based upon the experience of Germany which he claims are applicable to American conditions as well:

1. The apprenticeship system should be revived in our country in the form suited to modern conditions. In the education of youth in the ages from fourteen to eighteen a part of the education should be in the school and a part in the industry itself.

2. All the work for pupils under the age of fourteen should be given to cultural training.

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3. For pupils over the age of fourteen special vocational schools should be established separate and apart from the regular school system for the vocational training of all who do not go on to the higher professions. The cultural high school is to be reserved for the preparatory professional courses only.

4. These special vocational schools should be of two types: continuation schools in which boys occupied for most of their time in the regular industry as apprentices will spend a few hours per week in studies related to their special industry; and secondary vocational schools of the type of the Milwaukee School of Trades which attempt to give such full training in the special trades as to supplant the apprenticeship rather than merely to supplement it as in the case of continuation schools.

5. Systematic vocational guidance is necessary both for the welfare of the trade and for the welfare of the student.

6. "Vocational schools must be administered by practical men from the vocation and educators."

Mr. Cooley's presentation of vocational education in Germany is a very satisfactory one. It gives one a clear and well-rounded picture of the work done by the schools. It does not, however, show the various sociological differences between German conditions and American conditions. This failure to note the differences in the sociological conditions of Germany and the United States is probably chiefly responsible for Mr. Cooley's recommendations that we simply establish a counterpart of the German system in America as being the best possible form of organization for our purpose since it is the best for theirs. The relative poverty of the German nation, taken as a whole, the relatively small amount of money available for education as compared with the demands for the army and the navy, the paternalistic organization of industry and of government, the stratified condition of German society, the general docility and industry of the German character are matters which do not find their counterpart in our country. In proportion as American conditions are different it is probable that the solution of the problems of vocational education must be different. The place to find out what America needs is in America. A study of foreign conditions as presented in the excellent manner of this book is one of the most fruitful methods of stirring up ideas to use in analyzing the various factors of our own problem; but once having analyzed out the various factors, the solution must certainly be based upon conditions as they are at home. The borrowed garment does not often fit.

The People's School: A Study in Vocational Training. By RUTH MARY WEEKS. ("Riverside Educational Monographs," edited by HENRY SUZZALLO). Boston: Houghton Mifflin Co., 1912. Pp. ix+208. $0.60 net.

This little book is a valuable contribution to the discussion of vocational education, since it presents so many aspects of the situation in such compact

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form and vigorous, stimulating style. The author looks at the problems from the large, sociological, human welfare viewpoint, and shows in good perspective the various social contacts and relationships. The author writes apparently with full understanding of the situation derived from observation and investigation, and certainly with intensity of conviction and forcefulness of expression. The book ought to be very widely read. It is a type of which we need more.

The author is not content with the frequent assumption that the way to devise plans for a vocational school is to go abroad, find out how the work is carried on by the best schools in Germany or France, and then plan a system of work for America in imitation. Neither, in her opinion, is one community in our own country to imitate the work done in another community where conditions may be different in many ways. A plan of work is to be drawn up according to the needs indicated by a systematic social survey of the conditions of the particular community concerned.

The chapter headings show the ground covered. In "The Hand of Iron" the author shows how the problems have been complicated by the giving of the skill of industry over to the machine, and the making of the resulting unskilled man but a slave to the machine; she then indicates the educational solution. In "The Public School" and "The School for the Plain Man" she shows the lack of democratic fairness in our educational scheme as it now stands and points out the things that are needed for the democratic "square deal" in education. Other chapter headings are self-explanatory: "Trade Education and the Woman"; "In the Country"; "Trade Education and Organized Labor"; "Foreign Trade Schools"; "American Experiments"; "The Type of Trade School Needed in the United States"; "Choosing a Vocation." Carefully selected bibliographies of French, German, Swiss, English, and American literature on the topic are appended.

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"Education for Life in American High Schools." By WILHELM STEITZ. (*Neue Jahrbücher für das klassische Altertum, Geschichte, und deutsche Literatur, und für Pädagogik*, August, 1912.)

In the August number of the *Neue Jahrbücher*, Dr. Wilhelm Steitz, Prussian exchange teacher in the University High School for the year 1910–11, writes on "Education for Life in the American High Schools" ("*Die Erziehung für das Leben an den amerikanischen High Schools*"). He begins by saying that, like most German visitors to American schools, he has received the impression that they do not rank as high as the German schools in scholarship, exact knowledge, and especially historical interpretation. But, he continues, the American schools do not aim at scholarship in the same degree as the German schools, but rather at "education for life." The German schools of course also claim

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to prepare their students for life, but they try to accomplish this end by means of the scholarly and thorough training given their students in a course in general education. They pursue an indirect method, whereas the American takes the direct way, as he says. Dr. Steitz then proceeds to show what he means by "education for life," basing his observations in the main on his experience at the University High School.

He describes in detail and in an interesting and sympathetic manner those features of the American system which are designed to give social training to the pupils. He discusses the high-school publications, the monthlies, dailies, weeklies, and the annuals, the weekly assembly, athletics, debating, the organization of the classes with their officers and committees, the various clubs, and the school dances. He sees in the large number of short stories in the publications the influence of our monthly magazines, which abound in the form of literary entertainment most agreeable to the nature of the American. Viewed from a pedagogical standpoint, he thinks this form of composition deserves only encouragement, and he finds the stories well written. In the large-typed and sensational headlines and in the optimistic tone and fondness for exaggeration he sees the influence of the daily press.

He discusses the weekly assembly at length and notes especially the training in public speaking which the pupils receive. He finds that the boys and girls speak with assurance and in a simple manner, appropriate to the occasion. He observes in the assemblies also that fostering of the spirit of loyalty to the school which is lacking in German schools. The writer remembers, for instance, that in his school days the foot-ball enthusiasts remained in ignorance of the victories of the boat crew of their own school.

In the discussion of athletics, the writer is struck by the highly developed system of contests that prevails. After noting that we aim to develop the quality of leadership in the captains, the ability to work for a common cause on the part of the teams, and loyalty on the part of the onlookers, he points out how the athletic contests further the sympathetic relations between teachers and pupils because of the common interest and enthusiasm that they arouse. The contests are, however, so numerous, so exciting, and so time-absorbing that they must of necessity interfere with the ability of the pupils to do scholarly work.

After a sympathetic discussion of the above and many similar features of our educational system, the writer concludes that these things demand so much of the pupil's time and energy that his scholarly attainments cannot be very marked. It seems to him that these features could be introduced into the German system only by sacrificing something of the thorough training that is now given.

The writer then proceeds to compare the results of the two systems of education. The American method is undoubtedly successful in America. For one thing, the pupils have more *Schulfreudigkeit*. They take more pleasure and interest in their school life than German pupils. This, however, is con-

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fined only to the features outlined above. When it comes to the studies the *Schulverdrossenheit* is greater with us than among the German pupils. He also considers an important element the greater assurance of bearing and greater self-possession of American students, qualities which so often determine one's success in life. The German graduate of a gymnasium, the *Abiturient*, is an awkward figure in comparison with the high-school Senior. The outward assurance of the Senior is, however, in marked contrast to his intellectual immaturity, his lack of interest in higher intellectual questions, and his ignorance. Early independence in practical matters characterizes the American pupil, but this is probably primarily due to the environment afforded by a new country still rich in possibilities for advancement and to the fact that children are treated as grown-ups much earlier than is customary in Germany. But though the young American shows a greater independence in practical matters, this cannot be said of his independence in intellectual matters. The independent thinkers in America are fewer and the intellectual uniformity is greater than in Germany. The *Abiturient* has a larger capital in the way of possibilities for further intellectual development and the ability to work. The German can acquire at the university and in military service those things in which the young American excels; but the desire for serious thought and study must be implanted early or it will never really exist.

The article is well written and proves the author a careful observer and sympathetic interpreter of conditions widely different from those to be found in the schools of his own country. Such inaccuracies as appear are few and generally unimportant. While we readily agree when he speaks of our admiration for the German educational system, we are surprised at his statement that whenever in America there is a demand for a *höhere Arbeitskraft* we look for a German trained in Germany.

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The Conservation of the Child: A Manual of Clinical Psychology Presenting the Examination and Treatment of Backward Children. By ARTHUR HOLMES. Philadelphia: J. B. Lippincott Co., 1912. Pp. 345.

Twenty-five years ago children were roughly grouped into three classes, the bright, the dull, and the feeble-minded. In those days it was thought Nature had dealt so unkindly with individuals in the latter group that little, if anything, could be done for them by way of making them self-helpful. When a child was diagnosed as an imbecile, he was placed in a special institution with a view to having him cared for during the whole of his life. At the same time, there were many children in the schools who were not regarded as feeble-minded, but who gave teachers a vast amount of trouble because of intellectual or moral delinquencies. These delinquencies were generally

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thought to be due to some defect of the will which could be overcome if the latter were vigorously aroused. Any marked departure from what was regarded as normal intellectual activity and proper conduct was considered remediable by persuasion or coercion, unless the deviate were actually *non compos mentis*.

But during the last few years much has been written upon the subnormal or atypical or backward or retarded child. Professor Holmes's new book classifies and describes the various sorts of deviates which educational people, parents, and physicians have been interested in during the past few years. It is based on data gained from the psychological clinic which was established in the department of psychology in the University of Pennsylvania sixteen years ago. The purpose in this clinic was to study forms of deviation from normal intellectual and moral activities, the aim being to diagnose actual conditions in the intellectual and moral life of the retarded child, and prescribe remedies so far as possible. This clinic has attracted favorable attention throughout the educational world, and it has been of service to teachers, parents, and physicians. It has clarified and amplified our knowledge of atypical children, and it has suggested means and methods of treatment which people dealing with normal children almost wholly could hardly have accomplished.

Professor Holmes gives a good deal of space to a description of the work of this clinic, without referring to any great extent to what has been done elsewhere. He presents his materials, derived mainly from his own laboratory, in a practical way, for the benefit of teachers, parents, and all who may have to deal with retarded children. The various methods of making tests and measurements are indicated, and an abundance of concrete illustrations are given. Photographs of defective children and of methods of using apparatus for purposes of diagnosis are scattered throughout the book. The style is simple, direct, and non-technical, so that the volume may easily be read by any person interested in child welfare.

One could hardly go astray in predicting that within the next ten years there will be a psychological clinic established in every community where there are 2,500 or more children in the schools. It will be recognized that, lacking such a means for the study of backward children, teachers and parents cannot deal in an intelligent and effective way with the retarded pupil. Medical inspection is of considerable assistance in pointing out certain fundamental causes of backwardness; but still, as it is practiced in most of the cities of this country, it does not go very far in the diagnosis of either intellectual or moral deficiency. The mind of the child is so complex that a general and hasty examination, such as the medical inspector must make ordinarily, cannot reach the more subtle factors operating to the disadvantage of the retarded child. Everything of this sort helps, but medical inspection is not adequate, and it does not fully meet the needs of modern scientific education for all children. It is not intended to imply that the psychological clinic can solve all the problems connected with the training of intellectual and moral deviates. But it

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is vastly better than the guesswork of untrained parents, teachers, and physicians, and it is a considerable advance upon medical inspection even. It would, of course, be erroneous to assume that anyone has yet discovered how to diagnose the mind of a backward child so as to discover the precise character and limitation of each intellectual process, and the exact strength and tendency of every impulse. It will probably be a long time before we are able fully to accomplish this task; but the point is that we are making headway.

Professor Holmes's book is undoubtedly the best presentation that has yet been made of the work of a psychological clinic. Undoubtedly some of the classifications of clinical cases in this volume, and especially some of the suggestions for the treatment of backward children, will be modified as our knowledge in this field increases. But until these improvements are made, we ought to put into practical operation the suggestions made in *The Conservation of the Child.*

M. V. O'SHEA

UNIVERSITY OF WISCONSIN

Harmonic Part-Writing. By WILLIAM ALFRED WHITE. New York: Silver, Burdett & Co., 1911. Pp. xv+174.

The history of musical theory maintains its usual dilatory manner of procedure even today. The production of music—the song and symphony—has always been far in advance of the books which tell how it was done. One of the significant results of the intense activity in modern composers is that we are slowly evolving a sane theory for the musical works of a century or two ago. Especially in the subject of harmony are there signs of sane treatment. Both here and abroad progressive treatises are appearing. Mr. White's book is going to help in discovering some kind of reasonableness in this subject which so long has been merely a collection of inflexible rules and equally inflexible exceptions which the student was blindly to follow. He states his material to be forwarding four-part musical composition. He endeavors to base this on real musical thinking, and consequently casts away a number of old-time devices, such as figured bass, because, as he truly states, this led to little more than the student's merely counting up intervals from the bass note, irrespective of the sound, and writing down what his mathematical process developed.

The book is therefore strongly to be commended as an effort in the right direction, and one which will be useful not only to students beginning the subject, but to thousands who in past years have gone through the old grind and are painfully conscious of how little they got out of it. If any fault is to be found with Mr. White's treatment, it is that he is still hampered by the old methods; that he has not gone far enough forward. The reviewer believes that the subject is capable of even greater simplicity and that it is possible to do away with many of the arbitrary statements, such as that this or that chord is better in this or that inversion with 3d, 5th, or root, or what-not

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doubled. In other words, it is doubtful if any adequate treatment of the subject in this book can be attempted with the omissions which Mr. White in his preface frankly states he has made: "This text does not assume to offer a theory of music, nor does it present an exposition of scales, intervals, and chord material." Four-part writing must inevitably be based on these very factors, if it is to be logical and intelligent. Nor can this material be disposed of as elementary, as in a previous volume. The study of structure of the scale and of chords should not be separated from four-part or chord writing.

P. W. DYKEMA

ETHICAL CULTURE SCHOOL
NEW YORK CITY

Home Reading for High School Pupils. By MARY H. DOWD and F. MABEL WINCHELL. Manchester, N.H.: The John B. Clarke Co., 1912. Pp. 58.

There are several good high-school lists in the field, but as localities differ and tastes as well, each new one adds something of interest and merit. Only one fault can be found with this list: the space devoted to current fiction. Popular novels such as *The Rosary* and *Freckles* seem out of place in a high-school list, as attention should be directed from, instead of attracted to, that kind of reading. The high-school list has a place because it suggests something better than the latest popular novel.

Practical Use of Books and Libraries: An Elementary Manual. By GILBERT O. WARD. Boston: Boston Book Co., 1911. Pp. 81. $1.00.

Teaching Outline to Accompany the "Practical Use of Books and Libraries." By GILBERT O. WARD. Boston: Boston Book Co., 1911. Pp. 34. $0.50.

High schools in several cities have within the last five years given instruction to incoming classes on the use of the library. Mr. Ward's course is the most definite which has appeared for high-school students, being the results of his experience as supervisor of high-school branch libraries in Cleveland. The course includes eight lessons: "Structure and Care of Books," "Printed Parts of a Book," "Card Catalogue," "Numbering and Arrangement of Books in Public Libraries," "Reference Books," "Magazines," "Use of the Library in Debating," "Buying Books." The reference books discussed in the course and the extracts from other books are related to the high-school course and show the application of the library tools to next day's lessons. A useful chapter is that on the use of the library in debate, containing a list of debate handbooks and directions for procuring and using government documents and the *Congressional Record*. Specimen extracts from four dictionaries are included in the appendix to the manual.

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The lessons, according to the *Teaching Outline* which accompanies them, are intended to be given through the four years of high school. Fortunate, however, is the high school where such a course is given in the first year. Without such training students are at a disadvantage because of wasted time, and handicapped by lack of knowledge. Written exercises to be returned for each lesson are presented in the *Teaching Outline*, together with an oral quiz on each subject.

GRACE THOMPSON

FREE PUBLIC LIBRARY
NEWARK, N.J.

Masters of the English Novel: A Study of Principles and Personalities. By RICHARD BURTON. New York: Henry Holt & Co., 1909. Pp. ix+357. $1.25.

It is over three-quarters of a century since Emerson made his first visit to England and subjected the parent people to the fairest and sanest scrutiny it has ever known. One of the "English traits" he pointed out in the resultant work is the combination, in individual and nation, of the extreme of manly courage and strength and of feminine tenderness. In the years that have since elapsed literary criticism has repeatedly dwelt upon this national characteristic; perhaps no other English quality, save possibly the bias toward moralism, has been more emphasized. And yet in our studies of the novel, the literary type which has most sensitively responded to the gaining feminism in British life, little has been made of this important subject. In view of its profound bearing upon modern social and political ideals this omission is truly surprising: and it is the more surprising because English fiction from Lyly to Hardy is full of impressive evidence, both internal and external, of this significant trait. In fact, it is hardly too much to say that the history of the English novel has no meaning except as it chronicles the gradual displacement of the heroic ideal by the humanitarian, which is compounded of masculine strength and feminine tenderness.

It is gratifying, then, to find in Professor Burton's introductory chapter a plain, emphatic statement of this principle. To be sure, its significance is somewhat weakened by undue dwelling upon the growing importance of woman in fiction, and the consequent impression of a widening gap between the sexes; whereas the truth lies in the opposite direction. But there is a real service in bringing the matter to the fore; and in associating with this principle the progress of the democratic ideal, the larger conscious interest in personality, and the English novel's devotion to high serious purpose, the author shows himself very near to the heart of his subject.

With such indications of grasp and insight before him at the outset, the reader has disappointment in store for him in the following pages. Doubtless the title of the book promises merely a series of loosely connected studies rather than the logical exposition of a literary evolution. But surely the

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opening essay promises greater consistency of treatment than we find. The chapter on "French Influence," too, gives a definite promise of method that is never fulfilled. Here we must confess to a feeling of relief, for when the author leaves his well-tilled field of personal appreciation to chase the *ignis fatuus* of a realism thesis, we prepare to follow with no little apprehension for our cherished prejudices. But Mr. Burton was merciful, and contented himself, in the sequel, with a few generalizations that did little damage. Despite his courageous prefatory defense of this chapter, we believe the book would have been better without it.

Professor Burton has not written the history of the novel. As he has not pretended to do so, it would be unfair to quarrel with his work on this account. But it is really a matter of regret that one who shows himself so well qualified to take a larger view of the subject should not have struck deeper; we could wish that he had begun, say, with Malory, and traced the growth of this important art form through the stages of formation which best reveal the English people's need of such a mode of expression and the essential secrets of its hold upon life. A study of fiction beginning as near the top as Richardson, omitting to analyze the negative implications of the premature Elizabethan fiction, overlooking the great works of Bunyan in which the novel had its vital start, ignoring the *Tatler* and *Spectator*, which are at least as meaningful in the history of the novel as are the *Interludes* in that of the drama, such a study cannot possibly penetrate far beneath the surface of things.

Since Lanier's brilliant, though erratic, treatment of the subject, no historian of the novel has attempted to explain its rise and growth in terms of the life which generates it and which it reflects and interprets. There are points in the reading of Professor Burton's book when we are confirmed in the fear that criticism of fiction has somehow reached its anecdotage without passing through its prime. The old changes are persistently rung—of Richardson and his serving-maid confidantes, of the moist emotionalism of the eighteenth-century reading public, etc., etc. This anecdotal habit, together with a tendency to lurch after startling stylistic effects, are the only positive blemishes in a worthy and sincere series of criticisms, which include much that is suggestive and stimulating. In particular we would commend the chapters on Jane Austen, Trollope, and Hardy.

LOUIS A. STRAUSS

UNIVERSITY OF MICHIGAN

The Common People of Ancient Rome: Studies of Roman Life and Literature. By FRANK FROST ABBOTT. New York: Scribner, 1911. Pp. xii+290.

This volume belongs to a type of books which classical scholars should produce in increasing numbers, books which humanize and liberalize the cold facts of Roman and Greek history and civilization. Professor Abbott discusses certain social, economic, and political questions of ancient Rome and

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has other chapters on the language and literature, correlating the past with the present in a manner so interesting, because so human, that the book will furnish attractive and profitable reading even for non-classical students. The Americans are not an isolated people in the history of the race, living at an isolated period of time, but they are a part of the past notwithstanding the strong appeal which frenzied agitators make to "live in the present." By studying the successes and failures of our forefathers, economists and reformers may save time and effort in the attempt to solve the age-long problems that confront us now.

One of the most suggestive chapters in the book is "Diocletian's Edict and the High Cost of Living," describing the attempt of that emperor in 301 A.D. to regulate conditions that were somewhat similar to those of the present day. An imperial proclamation was issued fixing the maximum price at which beef, grain, eggs, clothing, and other articles could be sold and prescribing the penalty of death for any who attempted to sell at a higher figure. A comparative table of prices is given and the fact brought out that while the Roman workman received in wages only about a ninth or a fifteenth of what the American workman receives the average price of pork, beef, mutton, and ham in 301 A.D. was about a third of the average prices of these articles today. It is recorded that this effort of Diocletian to reduce prices failed; to regulate such matters by governmental restriction is difficult, for the fault lies deeper in the social system.

Another chapter deals with private benefactions among the Romans, another with corporations and unions, another describes the life of a Roman politician. Thus these chapters have to do with the practical everyday life of the common people, and offer interesting reading for the American citizen of the twentieth century. Earlier sections of the book relate how Latin became the language of the world, what the speech of the common people was and how it grew into the modern Romance tongues, the poetry of the common people, and finally a somewhat more technical essay on the origin of the realistic romance as embodied in the first-century novel of Petronius.

The reviewer repeats that we need more books of this kind which popularize the ancient classical civilization, for only by understanding the past can we ever hope to understand the present.

WALTER DENNISON

SWARTHMORE COLLEGE

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BOOKS RECEIVED

EDUCATION

Axson, Stockton, Cox, Kenyon, Hall, G. Stanley, and Tonks, Oliver S. Art Museums and Schools: Four Lectures Delivered at the Metropolitan Museum of Art. New York: Scribner, 1913. Pp. viii+144. $1.00 net.

Kingsley, Sherman C. Open Air Crusaders: The Individuality of the Child versus the System, together with a Report of the Elizabeth McCormick Open Air Schools. Chicago: The Elizabeth McCormick Memorial Fund (315 Plymouth Court), 1913. Pp. 128. Illustrated.

McKeever, William A. Training the Boy. New York: Macmillan, 1913. Pp. xviii+368. Illustrated. $1.50 net.

Moore, Ernest Carroll. How New York City Administers Its Schools: A Constructive Study. ("School Efficiency Series," Edited by Paul H. Hanus.) Yonkers-on-Hudson, N.Y.: World Book Co., 1913. Pp. xi+321.

National Society for the Study of Education: The Twelfth Yearbook. Part I. The Supervision of City Schools. By John F. Bobbitt, supplemented by John W. Hall. Bibliography by J. D. Wolcott. Edited by S. Chester Parker. Pp. 119. Part II. The Supervision of Rural Schools. By A. C. Monahan, L. J. Hanifan, J. E. Warren, W. Lund, U. J. Hoffman, A. S. Cook, E. M. Rapp, J. Davis, and J. D. Wolcott. Edited by S. Cheater Parker. Pp. 114. Chicago: The University of Chicago Press, 1913. Each part, $0.75.

Ontario Department of Education Bulletins, 1912. No. 1. The Montessori Method: An Exposition and Criticism. Pp. 72. Illustrated. No. 2. Industrial, Technical, and Art Education. Pp. 181. Illustrated. Toronto: L. K. Cameron, 1913.

Richter, Leonard. Educational Survey Preparatory to Organization of Vocational Education. Leonard, Robert J. Social Phases of Industrial Life and Vocational Guidance. With an Introduction by Frederick G. Bonser. (Teachers College Record, Vol. XIV, No. 1.) New York Columbia University, 1913. Pp. 64. Illustrated. $0.30.

Russell, James E., and Bonser, Frederick G. Industrial Education. New York: Columbia University, 1912. Pp. 50. Paper, $0.30; cloth, $0.65.

Robbins, Charles Leonidas. Teachers in Germany in the Sixteenth Century: Conditions in Protestant Elementary and Secondary Schools. (Teachers College Contributions to Education, No. 52.) New York: Columbia University, 1912. Pp. 126. $1.00.

United States Bureau of Education Bulletins. 1912, No. 28 (Whole Number 502). Cultivating the School Grounds in Wake County, North Carolina. By Zebulon Judd. Pp. 12. Illustrated. No. 33 (Whole Number 507).

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Statistics of State Universities and Other Institutions of Higher Education Partially Supported by the State, for the Year Ended June 30, 1912. Pp. 21. 1913, No. 2 (Whole Number 509). Training Courses for Rural Teachers. By A. C. Monahan and Robert H. Wright. Pp. 61. No. 3 (Whole Number 510). The Teaching of Modern Languages in the United States. By Charles Hart Handschin. Pp. 154. No. 5 (Whole Number 512). Monthly Record of Current Educational Publications (February). Pp. 16. Washington: Government Printing Office.

ENGLISH

Buck, Philo M., Jr. Social Forces in Modern Literature. Boston: Ginn & Co., 1913. Pp. ix+254. $1.00.

Lobban, J. H. (Ed.). Macbeth. (The Granta Shakespeare.) Cambridge (England): The University Press, 1911. Pp. xx+148. With a portrait.

Steeves, Harrison Ross, and Ristine, Frank Humphrey (Ed.). Representative Essays in Modern Thought: A Basis for Composition. New York: American Book Co., 1913. Pp. xiv+533. $1.60.

FRENCH AND GERMAN

Fraser, W. H., and Squair, J. A Shorter French Course. (Heath's "Modern Language Series.") Boston: D. C. Heath & Co., 1913. Pp. xxvii+316. $1.10.

Schrakamp, Josefa. Deutsche Heimat. New York: American Book Co., 1912. Pp. 403. Illustrated. $0.80.

Werner-Spanhoofd, Arnold. (Ed.) Aus vergangener Zeit: Kleine Bilder aus der deutschen Geschichte. New York: American Book Co., 1912. Pp. 278. Illustrated. $0.50.

MATHEMATICS, SCIENCE, AND INDUSTRIES

Hawkes, Herbert E. Higher Algebra. Boston: Ginn & Co., 1913. Pp. v+222.

Hough, Robert Harbison, and Boehm, Walter Martinus. Elementary Principles of Electricity and Magnetism for Students in Engineering. New York: Macmillan, 1913. Pp. vii+233. Illustrated. $1.10 net.

Moore, J. R. H. An Industrial History of the American People. (Teacher's Manual. Pp. 32.) New York: Macmillan, 1913. Pp. xiii+496. Illustrated. $1.25 net.

Noyes, William. A Syllabus of a Course on Elementary Woodworking. (Teachers College Syllabi, No. 4.) New York: Columbia University, 1913. Pp. 47. Illustrated. $0.30.

Tarr, Ralph S., and von Engeln, O. D. A Laboratory Manual for Physical and Commercial Geography (for use in high schools, normal schools, and colleges). Pp. vii+214. With maps. $0.25. Von Engeln, O. D. A Guide for Laboratory Geography Teaching (for use in connection with the laboratory manual). Pp. 20. With maps. New York: Macmillan, 1913.

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CURRENT EDUCATIONAL LITERATURE IN THE PERIODICALS[1]

IRENE WARREN[2]
Librarian, School of Education, University of Chicago

America lagging behind in aero-schools. Lit. D. 46:225. (1 Fe. '13.)

Bachrach, William. The two-year stenographic course at the Parker High School. Educa. Bi-mo. 7:229–35. (Fe. '13.)

Boyd, William R. How the Iowa state colleges are getting together. R. of Rs. 47:209–11. (Fe. '13.)

Bracq, Jean Charlemagne. French in the college course. Educa. R. 45:122–139. (Fe. '13.)

The author presents his opinions as to the many values of teaching French in colleges and the best methods to employ.

Buck, Gertrude. Some preliminary considerations in planning the revision of grammatical terminology, English J. 2:11–17. (Ja. '13.)

Caldwell, Otis W. The laboratory method and high-school efficiency. Pop. Sci. Mo. 82:243–51. (Mr. '13.)

Discusses the advantages of directed supervised study over the usual home study.

Canby, Henry Seidel. The undergraduate. Harper 126:592–98. (Mr. '13.)

Chapman, John Jay. Charles Eliot Norton. Harp. W. 57:6. (1 Fe. '13.)

Chubb, Percival. Education for play. Relig. Educa. 7:699–704. (Fe. '13.)

Clapp, John M. Oral English in the college course. English J. 2:18–33. (Fe. '13.)

Clark, Herbert F. Constructive morals and school life. Psychol. Clinic 6:252–55. (Fe. '13.)

Davis, Jesse B. Vocational and moral guidance in the high school. Relig. Educa. 7:645–53. (Fe. '13.)

Farley, George L. Causes of non-promotion. Psychol. Clinic 6:256–59. (Fe. '13.)

A brief statistical study.

[1] Abbreviations.—Educa. Bi-mo., Educational Bi-monthly; Educa. R., Educational Review; El. School T., Elementary School Teacher; English J., English Journal; Harp. W., Harper's Weekly; J. of Educa. Psychol., Journal of Educational Psychology; Lit. D., Literary Digest; Pop. Sci. Mo., Popular Science Monthly; Psychol. Clinic, Psychological Clinic; Relig. Educa., Religious Education; R. of Rs., Review of Reviews; School Sci. and Math., School Science and Mathematics; Sci. Am. Sup., Scientific American Supplement; Teach. Coll. Rec., Teachers College Record.

[2] Annotations by Dr. J. F. Bobbitt and Dr. F. N. Freeman.

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Harris, James H. An inquiry into the compositional interests of pupils in the seventh and eighth grades. English J. 2:34–43. (Ja. '13.)

A study of the kinds of composition and of subjects for composition preferred by seventh- and eighth-grade pupils.

Hatch, Henry D. Some observations on Scottish public educational provisions for promoting the life careers of pupils leaving school. Educa. Bi-mo. 7:203–21. (Fe. '13.)

Hedges, William. A year of prevocational work. Educa. Bi-mo. 7:191–202. (Fe. '13.)

Johnson, Franklin W. Preliminary study in moral education. Relig. Educa. 7:621–25. (Fe. '13.)

An inquiry into certain aspects of the practice of high-school students in certain types of moral conduct.

Jones, Elmer E. Individual differences in school children. Psychol. Clinic 6:241–51. (Fe. '13.)

The variation among a small group of children as determined by tests of association, reaction, observation, memory, perception of form, mathematics, and reading.

King, Irving. The opportunity afforded by the social life of the school. Relig. Educa. 7:604–11. (Fe. '13.)

An account of the resources at hand and of the requirements in utilizing them.

Kingsley, Sherman C. The newest interest in the mother and child. Child (Chicago) 1:13–16. (Fe. '13.)

Koeppel, George. Observations concerning the organization of schools and certain phases of educational work in Germany. III. El. School T. 13:287–93. (Fe. '13.)

The reform of school systems.

Leathes, Stanley. Modern languages in education. Educa. R. 45:155–66. (Fe. '13.)

Looking regretfully back at the good old days when Latin and Greek held beneficent sway, he considers the possibilities of using modern languages to equally good purpose.

Looking school facts in the face. Lit. D. 46:278–79. (8 Fe. '13.)

McAndrew, William. Social education in high schools. Relig. Educa. 7:597–603. (Fe. '13.)

A general statement of the worthlessness of the high school, as at present constituted, for social education.

MacDougall, Robert. The child's speech. V. The mastery of the tongue. J. of Educa. Psychol. 4:85–96. (Fe. '13.)

The development of control over the articulatory processes.

MacLear, Martha. The latest thing in education. Educa. R. 45:140–45. (Fe. '13.)

Presents two or three illustrations to show that the much-lauded schools of the past were probably not so efficient as sometimes painted.

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McManis, John T. The study of children in the normal school. Educa. Bi-mo. 7:236–43. (Fe. '13.)

Maxwell, William H. The attitude of the American parent toward education. Educa. R. 45:167–83. (Fe. '13.)

Deals with the various types of parents in their attitudes toward the work of the schools.

Miles, H. E. Work and citizenship. Survey 29:682–85. (15 Fe. '13.)

Presents on the basis of Wisconsin experience a vigorous plea for industrial education separate and apart from public-school systems.

Monroe, Walter S. Analysis of Colburn's arithmetics. V. El. School. T. 13:294–302. (Fe. '13.)

Motoring books to the people. Lit. D. 46:230. (1 Fe. '13.)

National Education Association Committee course for moral instruction in high schools. Relig. Educa. 7:681–91. (Fe. '13.)

O'Shea, M. V. Recent contributions to the literature of education. Dial 54:142–44. (16 Fe. '13.)

Pyle, William H. Mental and physical examination of school children in rural districts. Psychol. Clinic 6:260–62. (Fe. '13.)

Pyle, W. H. Standards of mental efficiency. J. of Educa. Psychol. 4:61–70. (Fe. '13.)

Some miscellaneous results from tests given to children of various ages.

Roman, F. W. Control of industrial schools of Germany. El. School T. 13:269–73. (Fe. '13.)

Gives the historical reason for the separate control of industrial schools.

School-books that ruin eyesight. Lit. D. 46:394. (22 Fe. '13.)

School of Education. A seven-year elementary school. El. School T. 13:274–86. (Fe. '13.)

Describes by a detailed analysis of the subjects of instruction how one year between the University Elementary and High Schools has been saved.

Scott, Colin A. Personality and purpose of high school students. Relig. Educa. 7:626–30. (Fe. '13.)

Proposes making the work of the high school the expression of purposes cherished by the pupils.

Scott, Fred Newton. Our problems. English J. 2:1–10 (Ja. '13.)

Sharp, Frank Chapman, and Neumann, Henry. A course in moral education for the high school. Relig. Educa. 7:653–80. (Fe. '13.)

Shepherd, John Wilkes. Some suggestions for the teaching of nature study. III. Educa. Bi-mo. 7:247–63. (Fe. '13.)

Showerman, Grant. Life and letters. Educa. R. 45:109–121. (Fe. '13.)

A mediation on the relations and interactions of literature and active human experience.

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Smith, David Eugene. Number games and number rhymes. Teach. Coll. Rec. 13:1–110. (N. '12.)

The description of a number of different sorts of number recreations with some discussion of their application to the teaching of number.

Smith, Harlan J. The educational work of a great museum. Sci. Am. Sup. 75:86–87. (8 Fe. '13.)

Swift, Edgar James. School organization and social growth. Relig. Educa. 7:612–16. (Fe. '13.)

The use of the gang spirit in promoting wholesome social organization.

Tufts, James H. The study of public morality in high schools. Relig. Educa. 7:631–36. (Fe. '13.)

Shows that at least in the field of public morality there is much that can and should be taught in the school.

Wells, Dora. Beginnings in the Lucy L. Flower Technical High School. Educa. Bi-mo. 7:222–28. (Fe. '13.)

Whitney, Worrallo. Science in the high schools, an investigation. School Sci. and Math. 13:183–196. (Mr. '13.)

A study by the questionnaire method which indicates that high schools in the Middle West are modifying their science teaching so as to connect it with everyday experience.

Wilson, H. B. Vocational self-discovery. Relig. Educa. 7:691–98. (Fe. '13.)

Winch, W. H. Mental adaptation during the school day as measured by arithmetical reasoning. Pt. 2. J. of Educa. Psychol. 4:71–84. (Fe. '13.)

Wolfe, L. E. The many-book versus the few-book course of study. Educa. R. 45:146–54. (Fe. '13.)

An excellent article that should be widely read, showing that, for the sake of concreteness, vividness, interest, and effectiveness, there should be a large amount of reading in connection with each subject instead of the usual condensed textbook plan.

Wyche, Richard T. The story tellers' league. World's Work 25:588–90. (Mr. '13.)

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THE SCHOOL REVIEW

A JOURNAL OF SECONDARY EDUCATION

VOLUME XXI MAY 1913 NUMBER 5

THE PRACTICAL RESULTS OF RECENT STUDIES IN EDUCATIONAL STATISTICS[1]

WALTER F. DEARBORN
Harvard University

Experimentation in education, however desirable, must, in the nature of the case and in the interests of its subjects, be much more limited in amount and scope than in the natural sciences and even in some other of the social sciences. It is for this reason the more necessary that present practices and methods now in use in education be evaluated before changes are made in them or they are replaced by others. Present practices, until they have been tested and their effects known, as far as that is possible, should be regarded as nothing but great educational experiments. Only in this way can we have any real guaranty that the new in education is any better than the old.

Since the effects of educational practices can seldom be estimated by the results in any one case but only from the results in large groups of cases, they involve statistical procedures for their proper understanding and evaluation. Statistics is a science of making numbers intelligible. Unfortunately, it frequently produces the opposite effect. Many of us pass over columns of figures and statistical computations as gladly and with as few compunctions as we do the descriptions of natural scenery which interrupt the plot

[1] Read at the meeting of the Harvard Teachers Association, Cambridge, Massachusetts, March 15, 1913.

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of an exciting novel. But whatever our prejudices, it must be recognized that the necessary statistical studies of school work have been all too few and that in our office and classroom records there is not a little material, the proper study of which would furnish a basis for discriminating judgments of the value of past and present practices in education.

I wish to call attention to one group of such studies on the relations of schools and colleges.

College authorities usually estimate, in a general way, the efficiency of high schools and academies on the basis of the preparation and attainments of the pupils who come to them from these schools and, in their turn, the high-school principals have been rating the elementary schools in terms of the success or failure of the elementary pupils in the high-school classes. With the decreasing importance of the entrance examinations and the extension of methods of certification and accreditation of schools, these judgments passed by one institution upon another have assumed considerable importance. The principle of these comparisons, namely the rating of a school on the basis of the relative standing taken by its pupils in a second institution, is, it is believed by the writer, a sound one and may lead to reliable conclusions. The methods and ways in which this principle is ordinarily made use of are, however, frequently crude and incomplete and lead to individual opinions rather than to reliable evidence.

These methods may not only be made much more accurate and trustworthy but are susceptible of much further extension. By their use it is not only possible for higher schools to accredit the lower schools justly, but it is also possible for the lower schools to pass reliable judgments on the quality of work in the higher institutions. As an illustration of this last statement, a condition may be cited that has been met with in these studies. The graduates of a certain academy have, for a period of many years, gone in large numbers to two colleges. At one of these colleges, even the lowest ranking pupils from the academy are admitted and take satisfactory standing. At the other college, only the best of the academy's graduates find admission, and frequently they take no more than average standing in their college work. This condition is sub-

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stantiated by other high schools and academies which send pupils to these two colleges and should be sufficient to raise a strong presumption that the standard of work in one of these colleges is very much inferior to that of the other college.

Comparisons such as this, on the basis of the character and attainments of the same or comparable groups of students in two or more different institutions, may therefore not only furnish facts on the basis of which the college may evaluate the work of the various secondary schools but may often furnish the basis of reliable judgments by the secondary schools in regard to the character of the higher institutions. The latter may be judged, first, by the sort of pupils they secure and, secondly, by the way in which they handle this product of the secondary schools. A group of high schools may thus, through the comparative records which their students make in the colleges and higher technical and professional schools, pass judgment upon these higher institutions of learning.

A similar outcome will result from the comparison of high schools with elementary schools. High-school teachers criticize freely the product of the elementary schools and they do so practically always in terms of high-school standards. These contributing elementary schools have just as good reason to estimate and control the character of work in the high schools in relation to their own standards, and they have in the comparative records of their pupils in the high schools excellent means of doing so.

A simple study of this latter sort, which not a few principals in the Middle West are now carrying out to advantage in their own schools, may be illustrated by the following example. A group of about 100 students in a small city high school were divided into three divisions on the basis of their average rank in the elementary school. The question was then asked, "In how far do those students who stood in the various thirds—upper, middle, and lower—of their class in the elementary school maintain the same relative rank in the high school, that is, remain in similar divisions of the high-school class?"

The accompanying table answers the question. Of the pupils who were in the first third of the elementary school class 81 per cent maintain their rank in the first third of the high school, 50 per cent who were in the middle third remain there in high school, and 64

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per cent of those who ranked lowest in the elementary school are found to be in the lowest third of the high-school class. On the average, then, 65 per cent remain in the same divisions of the high school in which they were in the elementary school. Small variations which are of no great significance may be neglected by the comparison made in the second part of the table (Tertile-Median Method), which shows that 90 per cent of the pupils who were in the first third of the elementary school class maintained a position above the middle (median) of the high-school class, and 84 per cent of those in the lowest third remain below the median of the high-school

TABLE I

PERCENTAGES OF RETENTION

	1 Tertile	2 Tertile	3 Tertile
	Percentage	Percentage	Percentage
Tertile Method:			
Average	81	50	64
Mathematics	75	51	78
English	66	40	53
		High	Low
		Percentage	Percentage
Tertile-Median Method: (Per cent in extreme tertiles not varying beyond the median.)			
Average		90	84
Mathematics		87	84
English		81	78

class. By averaging these two percentages, we may express the "percentage of retention" of this elementary school in a single figure, as 87 per cent. In other words, only about 13 per cent of these students differed in rank in high school appreciably from the rank which they had attained in the elementary school.

The comparison has also been made for separate subjects, as shown in the table for mathematics and English. The results point to a high degree of correlation between the work and standards of this particular elementary school and high school.

The problem is more complex when the comparison is made between several elementary schools and high schools in a large city. Such a study has been carried out successfully by Mr. Carter in the

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schools of Milwaukee. His study was made on the basis of one year's class of 1,497 pupils from 39 elementary schools. Of these, 670 or about 45 per cent entered high school.

There are several features of the study which demand special attention.

One elementary school may send largely its poorest or average pupils to the high school; another school may send only its better pupils. It is evidently not fair to judge of the merits of the two schools by such an unequal sampling of their pupils.

In general, those who entered high school in this city were but little superior in scholarship to those who dropped out of school on the completion of the eighth grade. Less than 57 per cent of those who remained in school ranked above the middle (median) of their class in the elementary school. The same fact may be expressed by stating the percentages of those who went on to high school from the various thirds of the elementary classes. This is done in the first line of the accompanying table on the basis of the averages from twenty-five schools, and shows that 27 per cent went to high school from the lowest thirds of the elementary school classes, 35 per cent from the middle thirds, and 38 per cent from the high thirds.

TABLE II

PERCENTAGE OF PUPILS ENTERING HIGH SCHOOL FROM THE TERTILES OF ELEMENTARY SCHOOL CLASSES

(Subject Languages)

	Low Third	Middle Third	High Third
	Percentage	Percentage	Percentage
1. Average 25 Schools.....	27	35	38
2. School No. 14.....	49	35	35
3. School No. 4.....	21	57	86

Two schools whose representation differed noticeably from these averages are cited by way of illustration in the next two lines of the table. From School No. 14 one-half of the poorest pupils (49 per cent) were sent to high school and one-third of the best (35 per cent); from School No. 4 a fifth (21 per cent) of its poorest pupils and over four-fifths (86 per cent) of its best pupils went on to high

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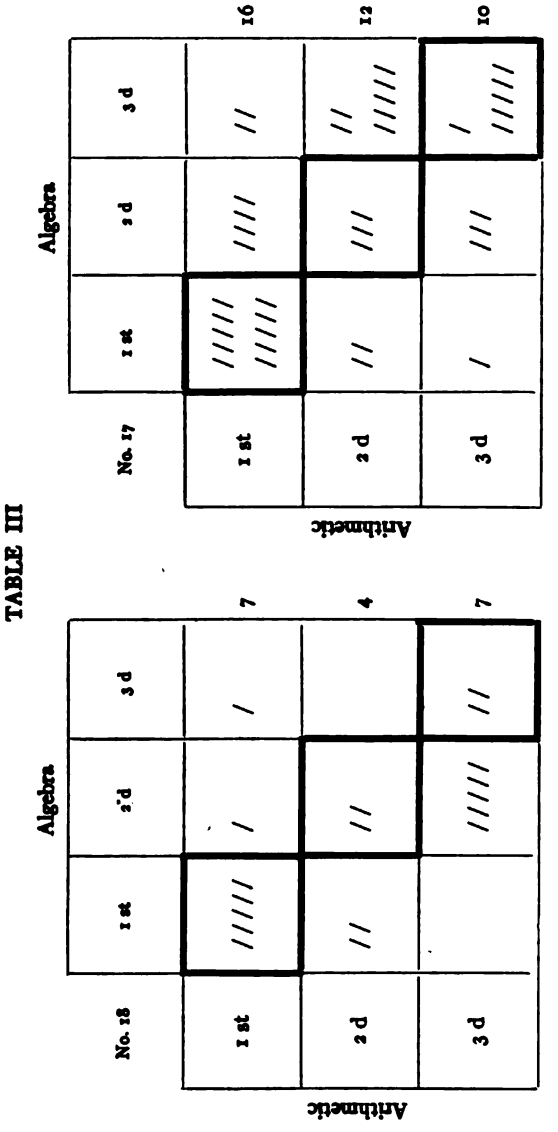
school. If one is to judge of the relative merits of these two schools in terms of the performance of their pupils in high school, these differences in representation must very evidently be taken account of. This has been done by Mr. Carter by means of the following scheme of comparison:

TABLE III



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In the horizontal lines, the pupils are arranged by the thirds of the elementary class from which they came; in the three vertical columns, the same pupils are classified according to their standing in the high-school class. The subjects of comparison are arithmetic and algebra. The pupils in the three diagonal squares inclosed by heavy lines have not changed their relative position in going from the elementary school to high school. The pupils in the three squares below the heavy lined squares have advanced; those above these squares have regressed in relative standing.

School 17 sent a group to high school which was above the average of the original class, there being more students from the upper third than the lower. In the high school, 13 of these pupils fell in rank while 6 improved in rank. In other words, a better than average group on the basis of elementary school standards took less than average standing in the high school—a poor showing for the school.

In School 18, the class originally numbered 28: 18 of these went to high school including 7 from the lowest third of the class. Of these 18, 7 improved their rank while but 2 were lowered in rank. In other words, a very average group from the elementary school, including a large representation of the poorest pupils in school, made a better than average standing in the high school—a very good showing for the school.

The correlations of standing between the elementary and high schools in this city were, on the average, low, as has been shown in Table II. Miles found a much higher percentage of relation in a study of elementary and high schools in the state of Iowa. His results are expressed by the Pearson coefficient of correlation, as +71 per cent. The similar coefficient of correlation between 8 large high schools and the University of Wisconsin was found to be +80 per cent. F. O. Smith found a similar degree of relation between one high school and the State University of Iowa. Expressed in terms of the change of rank about the median, the results at Iowa and Wisconsin are in close agreement, about 70 per cent of pupils remaining in each case in the respective halves of the class in which they stood in the high-school grouping. President Lowell has carried the comparison a step farther and has shown that

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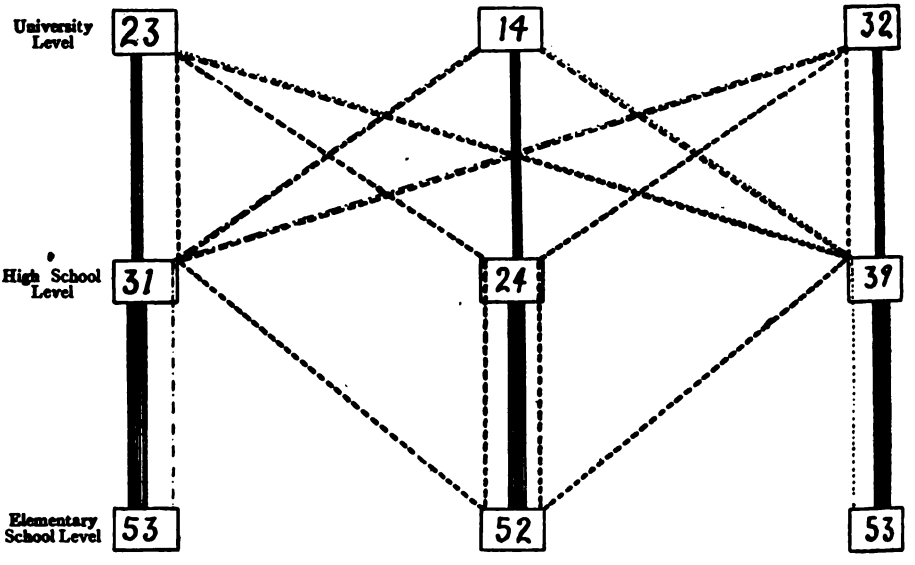
the students who take high rank in college, irrespective of the subject-matter of their courses, are the ones who take the superior rank in the professional schools of law and medicine.

Dr. Clement, in a study of a large number of elementary schools, high schools, and colleges in the state of Kansas, was the first to follow the course of a group of the same students through three institutions from the elementary school to the college. Some of his results may be roughly summarized by making use of the following chart, an adaptation of one suggested by Mr. Carter.[1]



A pupil starting in any third of the group in the elementary school has according to this scheme nine possible paths by which he may reach college; he may take rank in either the high, middle, or low third of the high-school class, and finish his course in any one of the thirds of the college class. With these nine possibilities of fluctuation, it is interesting to find that in the high third of the class over 60 per cent take the straightest course—that is, they go from first rank in elementary school to first rank in high school, to first rank in university. In the group under study, there are 158 pupils.

[1] In an unpublished study.

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The number who follow the straight courses are indicated in the diagram by continuous lines; those who follow other courses are indicated for the middle group by heavy dotted lines. The percentages are given below.

TABLE IV

PERCENTAGES OF RETENTION (ACCORDING TO ABOVE CHART)

Elem. school–Colleges.....	43.4	26.9	60.4
High school–Colleges.....	74.2	54.4	82.1
Elem. school–High school.....	58.5	46.2	73.6

There is really a higher percentage of retention if the beginning and end of the course are alone considered. Six pupils, for instance, who started in the first third of the elementary class, fell to lower thirds in the high school but regained their position in the college, giving a final percentage of 74 per cent of those starting in the upper third of the elementary-school class, and finishing in the upper third of the college class.

Clements' results may best be expressed in terms of the percentage of pupils in the high and low thirds of the class who do not change their relative position sufficiently to cross the middle line of the class (Tertile-Median Comparison). These results, as shown in the following Table V, indicate that there was between the institutions a very high degree of correlation.

TABLE V

PERCENTAGES OF RETENTION (TERTILE-MEDIAN METHOD)

Grammar School No. 5–High School No. 5–College No. 2 = 70 per cent (90 cases)
Grammar School No. 6–High School No. 6–College No. 3 = 75 per cent (90 cases)
Grammar School No. 1–High School No. 1–College No. 1 = 85 per cent (158 cases)

In the light of these results and those summarized above, we may conclude that a percentage of retention of 75 per cent expressed in terms of the Tertile-Median Method or of the Pearson Coefficient of Correlation on the basis of the relative rank maintained by pupils in related institutions is an attainable standard. Marked deviation from this standard either in the case of separate subjects of study or on the basis of the general averages, and either within the same

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school or between different schools, might well lead to investigations of the reasons and causes.

The consistency of performance from the early to the late years of school life in the case of such large groups of students, as is shown by these results, is not without significance to the student and administrator interested in the possibilities of educational prognosis.

The results bear also on the more general question of nature versus nurture, of the mental differences due to inborn capacity and those due to training. Students appear from these studies to maintain in surprisingly large numbers from the elementary school to the college the relative rank with which they began. The diversity of training in school and college is perhaps after all not great—the comparison would gain interest, if groups of students could be compared whose intermediate training between the early years of the elementary school and the college or the professional school differed much more than is the case of those students who pursue the regular courses and methods of study—but taking the results as they stand, they appear to indicate that the changes which school training produces are not sufficient to overbalance the differences in mental ability which are there to begin with.

Aside from such bearings as these studies may have upon general educational questions, they seem to discover in a very practical way maladjustments between schools and departments of study, and instances of inharmonious working, and have proved stimulating in their effect on the organization and administration of schools. This is their chief value.

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THE PRACTICAL RESULTS OF RECENT STUDIES IN EDUCATIONAL PSYCHOLOGY[1]

STEPHEN S. COLVIN
Brown University

When we consider the results of experiments in learning that have emanated from the psychological laboratories during the last decade and the investigations in experimental education that have been conducted during this same period, we are confronted with a mass of material that offers numerous points of contact with the problems of the schoolroom and suggests methods of instruction and principles of school management that are rich in promise. Still, on the other hand, there is an element of discouragement in all of this. The material is so extensive, and so unorganized and unrelated, that as yet it offers no thoroughgoing and well-digested body of facts from which to draw final and unequivocal conclusions in regard to the problems that arise in connection with the schoolroom. There are many important hints, a few definitely established facts and principles to guide the teacher, but there is much that is contradictory and uncertain in its application. Nevertheless there is a considerable amount of this material that can be directly utilized in its practical bearings by the teacher of today. It is to some of the more certain of the inferences that relate to the aims and methods of teaching that I wish to call your attention this morning.

All teaching, whether it is that of the elementary school, the college, or the university, has a few fundamental aims that it must set before itself if it is to accomplish results. In the first place, proper instruction aims at the formation of correct habits of both mind and body; again, it aims at the presentation of certain facts and principles and the grounding of the pupil in these facts and principles so that they shall become a part of his knowledge;

[1] Read at the meeting of the Harvard Teachers' Association, Cambridge, Massachusetts, March 15, 1913.

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finally, and of chief importance, it aims at the developing of judgments and of general attitudes that are important in the interpretation of life in its various relationships. As far as the formation of habits and the instilling into the mind of facts and principles are concerned, the teacher's aim is to reduce the mental processes to their lowest terms, so to speak; that is, to eliminate consideration, comparison, judgment, and reasoning, and to make the mind automatic and quick to act without deliberation or elaborate thinking, in other words, to mechanize mental processes and to do away with consciously directed activities. On the other hand, the teacher must develop in the pupil the tendency and the ability to act in the light of reflective consciousness, rather than in terms of habit. These two aims are quite distinct and should be clearly separated in all good teaching.

To realize the first of these aims in instruction we must employ certain methods of teaching that may be characterized rather loosely as drill. It is therefore to the consideration of drill and the light that is thrown upon it from the standpoint of investigations in applied psychology and pedagogy that I wish first of all to call your attention. In recent years drill has been held in slight esteem by many, and while at one time it was the chief method of teaching, it has fallen of late into such ill repute that many teachers, particularly those who have older pupils under their charge, fear to admit that they ever practice it. The extreme attitude in regard to drill is voiced by McMurry,[1] who says, "Extensive drills in the future will be the recourse of those teachers only who lack energy to teach." There are various reasons for this attitude in regard to drill. One is undoubtedly the general dislike that teachers have to take up the burdens of systematically planned and rigorously developed drill. It is not easy or agreeable to keep everlastingly at some habit, fact, or principle that is to be continually presented until it has become second nature to the pupil. The easy way is not to insist on drill, but to relax it and to give the attention to something that is inherently more interesting and has in it less of the element of drudgery.

However, while there is a natural inclination on the part of both

[1] *How to Study and How to Teach*, 1909.

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pupil and teacher to avoid drill, it is not for this reason primarily that in many instances it has become almost obsolete, particularly in the higher grades of instruction in the secondary school and the college. It is a matter of common observation that drill does not always yield results at all commensurate with the large amount of time and of energy expended in this drill. Further, experimental investigations in the psychology of learning have shown what may be termed the law of decreasing returns in all drill activities. The first few repetitions of materials to be learned give much higher results relatively than those that follow, and after a time the learner reaches a point where the drill adds very little to his acquisition. It seems time practically wasted to continue drill beyond a certain point. Interest is deadened through continued practice, and attention fails. When this point is reached all attempts at further learning are futile, and the wise teacher stops and turns the activities of the pupil in another and more fruitful direction. Further, investigations in experimental pedagogy, such as that of Rice on "The Futility of the Spelling Grind," published in the *Forum* in April and June, 1897, and that of Cornman on "Spelling in the Elementary School," appearing in 1902, seemed to give color to the contention that a great deal of drill is time thrown away.

However, experimental investigations in recent years indicate clearly that drill, when conducted under proper conditions, is an extremely important factor in efficient instruction. In this connection two studies of Thorndike should be mentioned. He found that practice in multiplying three-place numbers by three-place numbers when this drill consumed a total of only a few hours raised the efficiency of mature subjects to such an extent that at the end of the period they were able to do the task in two-fifths of the time that it had first taken.[1] In a later experiment he found that seven days' practice in adding resulted in an average improvement of 29 per cent.[2] This increase in ability to perform these operations seems all the more remarkable when it is remembered that exercises in multiplication and addition belong to a class of

[1] "The Effect of Practice in the Case of a Purely Intellectual Function," *American Journal of Psychology*, XIX, 374–84.

[2] "Practice in the Case of Addition," *ibid.*, XXI, 483–86.

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habits that with the adult are supposed to be well perfected at the beginning of the special practice and hence are not as likely to be capable of further improvement as are habits that are at the start less perfectly formed.

Likewise Brown reports in a series of articles in the *Journal of Educational Psychology* for 1911 and 1912 that drill in the fundamental operations of arithmetic—addition, subtraction, multiplication, and division—when practiced five minutes daily for thirty recitation periods, resulted in clear improvement both in speed and accuracy.

Starch found that drill in mental multiplication for fourteen days showed positive effects in improving arithmetic tests in adding fractions and in various other simple operations.

Wallin[1] seems clearly to have demonstrated the value of drill in spelling, when certain precautions are taken to emphasize the words that are being studied. These tests, conducted in the Cleveland schools, gave evidence of remarkable improvement when but a few new words were studied each day and when the words previously learned were properly reviewed. Wallin's experiments emphasize the importance of what has been termed "focalization" in mechanical learning. The material that is the subject of drill must get into the focus of consciousness if the results are to be of much value. In other words, mere repetition is of little avail unless the mind is held on what is being repeated. In order to secure the proper focalization the materials learned must be made as striking as possible. This often means that they be presented under many new conditions. In other words, while the elements that are the object of drill remain the same, the form in which they are presented should be as varied as possible. Mere drill without variety is a deadening occupation, and very soon a point is reached where further advance in learning is checked through the effect of monotonous repetition.

Wallin's tests not only emphasize the fact that the elements on which the learner drills must be in the focus of consciousness; they also show the value of concentration in drill. It is not wise to drill on too many elements at the same time. Just a few facts

[1] *Journal of Educational Psychology*, 1910.

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should be selected each study period to be emphasized. A large number of new facts are distracting. The drill should not lead to mental confusion by the multiplicity of new details.

Recently an attempt has been made to determine the optimal length of a drill period and the interval of time that should elapse between successive drill periods. Pyle[1] concludes from tests extending over an interval of two years and conducted with mature subjects that the length of a drill period to obtain the most satisfactory results should be about thirty minutes and that the drill should be repeated daily if possible, since better results are secured than if the drill is given every other day on the one hand or twice a day on the other.

From the present status of the investigations concerning drill it seems reasonable to conclude:

a) Properly conducted drill is a valuable adjunct to efficient teaching where it is desirable to secure mechanization and ready response, as, for example, in the use of words and constructions in a foreign language; in the employment of essential processes in mathematics; in the manipulation of materials in the laboratory and the shop; in the command of fundamental facts in history and the social sciences; in the application of principles and rules in practically all of the subjects of the curriculum. The teacher who out of mere inertia or because of his enthusiasm for the higher things in learning ignores drill is neglecting a large factor in the development of his pupils. It is not true that drill is the device of the inefficient teacher. On the contrary it requires detailed preparation. Carefully conducted drill is the mark of good teaching in every grade of instruction.

b) Variety in presentation is essential in drill. The same materials should be given in as many new settings as possible. It is the old in the setting of new surroundings that most readily secures the attention. Monotony of presentation is deadly to all learning. This principle is particularly important in connection with that drill that is secured through review. There is ample opportunity in review to present the previously learned facts in novel relationships and thus secure attention that would otherwise be lacking.

[1] *Psychological Bulletin*, February 15, 1913, p. 13.

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c) The number of new elements that are the subject of drill at any particular time should be small. A multiplicity of details distracts the attention and accomplishes no good result. While the older materials may be added to the new in any drill lesson, the new materials should be the elements particularly held in attention. It is better to attempt a few new words in a foreign language in each lesson and to introduce new principles of construction sparingly than to try to cover a large amount of ground at any one time. Where drill is concerned it is concentration that counts. Nothing is gained by spreading the effort of the pupil over a wide and diversified field.

d) In the case of the secondary-school pupil a drill period of more than thirty minutes is likely to prove decreasingly valuable. It is probable for many reasons that the drill lesson cannot occupy that amount of time daily. It seems better to have a drill period each day for a short interval than every other day for a longer interval.

Closely connected with the topic of drill, indeed scarcely to be separated from it, is that of habit-formation. This is a necessary part of all school instruction and one that no teacher can ignore. In the primary grades the formation of correct habits is perhaps the most necessary phase of the education of the child. Here the best teacher is the one who can inculcate the right habits from the start. While habit-formation is all-important in the first years of school life, it cannot be ignored in the grammar grades nor in the secondary school. On the whole it may be said that the habits formed in the elementary school, particularly in the primary grades, relate more to general school attitudes, while those that the secondary-school teacher should chiefly consider center in the particular courses that he is teaching. However, whatever their nature may be, we have today, thanks to many careful investigations in this field, a considerable amount of knowledge in regard to how habits are acquired. We can consider briefly some of the most significant of the facts that have been established in this field of investigation.

a) In the first place the teacher should be aware that while the aim in habit-formation is ultimately the elimination of conscious

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control, the acquisition of any complex habit is greatly facilitated by the learner recognizing the factors involved in the habit-building process. Correct methods of performance may be stumbled on, but the "blundering method" is extremely wasteful and it is the function of the teacher to step in and direct the learning; to see to it that the pupil intelligently grasps what he is doing. There is not a subject in the curriculum in which the pupil may not be materially aided by being shown how to go about his work in the proper way. Hence the teacher should first definitely determine what the best methods of attack are in learning the particular subjects that he has in charge. After this has been done it should be his aim to habituate his pupils in these methods, first by explaining what they are and then showing their value.

b) Efficient habit formation is aided in the second place by the proper affective attitude of the learner in regard to his work. It is imperative that he feel well disposed toward his task, and for this reason it is essential that he achieve a reasonable success in what he is trying to do. The effective teacher will strive in all legitimate ways to give the pupil this proper feeling attitude. Hence, while he may insist on strenuous work, he should never make it so difficult that the average pupil cannot score a reasonable success. Repeated failures make learning impossible. No school subject should be made unnecessarily hard or distasteful. There is no merit in keeping pupils at grinding tasks, merely for the sake of the grind involved. However, there are teachers who apparently fear that the subject that they teach may become too easy and are constantly looking for devices to increase its difficulty. The teacher should strive to make the subject as easy as is compatible with its mastery.

c) In forming a habit the learner needs some objective standard by which he can measure his progress both in comparison with his own former achievements and with those of his fellows. The good teacher should aim as far as possible to set up such standards and make them evident to his pupils. He should consider it one of his functions in recording marks and in giving grades to make them expressive of real attainment. To mark well is a fine art.

d) It has been shown in earlier experiments and conclusively

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substantiated by those of the last few years that habits learned in one connection do not of necessity transfer themselves to activities in which there are novel conditions. Whether they do transfer or not depends largely upon whether these habits have become definite ideals in the minds of those who have formed them. The learner must be shown the significance and the value of such habits. This is particularly important in teaching the technique of scientific investigation, in inculcating the value of artistic appreciation and the like. The teacher who wishes these habitual attitudes to carry over from one field to another must see to it that these attitudes are recognized by the pupils in general as valuable.

The question of the conditions under which correct habits are formed is closely related to that of the whole problem of economic learning, that has been given much attention in the investigations of the last decade. It is not my purpose to enter into a detailed consideration of these results, nor to point out their practical importance except in so far as they indicate desirable methods of instruction.

a) The most recent experiments seem to have conclusively established the earlier conclusions arrived at by Lottie Steffens that learning by wholes is more desirable than learning piecemeal. This means as far as instruction is concerned that the teacher should present whole topics for consideration rather than small and relatively disjointed parts. It is particularly important that there should be a preliminary view of the whole topic to be considered. An intensive study of any particular part should always be preceded by a survey of the entire topic. It is sometimes desirable to have this survey extend beyond the bounds of a single lesson and perhaps cover the material of a number of related lessons, centering about the same general topic. Teachers, as a rule, tend to make their presentation too fragmentary and choppy.

b) Although there are some conflicting results, recent investigations for the most part tend to confirm the original findings of Ebbinghaus and show that it is not wise to spend a large amount of time on any one topic of study at any one sitting. For the high-school pupil, as has already been suggested, intensive work for thirty minutes in any one direction is probably better than a longer

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period of application. It is better to come back to the subject again at a later sitting than to attempt to master it in one period of study. For the teacher this fact means that it is wise to spread the presentation of a topic over a considerable period and not aim to complete it in a few intensive lessons. The spiral plan of teaching in the elementary school may well be extended with certain modifications to the secondary school.

c) One of the most effective methods of firmly establishing a fact in the mind of the learner is through active recall of what has previously been studied. This means that the teacher should make use of the recitation in a considerable measure as a means of skilfully directing the pupil's attention to the recall of essential facts. In any case the recitation should not be utilized primarily to discover what the pupil knows—it should be a pedagogic device to instruct him in his learning.

d) In all learning there are likely to exist factors that mutually inhibit one another. The presence of interference has been emphasized by a number of experimental studies. Recently it has been shown that two naturally interfering activities, while they tend in the early stages of learning mutually to inhibit each other, may both finally be perfected in such a way that one can be carried on without any detrimental influence on the other. However, this interference can be eliminated only when both activities have been firmly established. This means as far as the teacher is concerned that he should not undertake to present something that he cannot give sufficient time to for its thorough mastery by the pupil. It would be unwise, for example, to have the pupil partly master two foreign languages at the same time, and leave them before the proper language habits had been definitely established. It should be the ideal of the teacher to make relatively complete that which he undertakes to teach. Completeness as an ideal does not mean that he should attempt to teach every detail of a subject (probably most subjects in the secondary school are taught in too minute detail), but it does mean that he should require a mastery of those parts of the subject that he deems essential for the work in hand.

Up to this point we have considered the teacher's art chiefly as consisting in making mechanical certain parts of the materials

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of instruction, and we have emphasized those principles that have been discovered by experimentation and observation that bring about this mechanization in its most effective form. Thus, we have considered the laws that govern drill and the principles that must be observed in habit-formation; we have briefly outlined the most effective rules to be observed in the general technique of learning and noted the rôle of the teacher in these important particulars. However, we must recognize that the securing of mechanical modes of reaction is but one of the aims of teaching. The pupil must not only become proficient in the more habitual aspects of his work; he must not only have an ability rapidly and accurately to perform various tasks that are set before him; he must also at times be capable of arriving at new perceptions; of forming new conceptions, and of framing valid judgments. The art of the drill-master must not be despised, but the highest art of the teacher is leading his pupils to think. Here the aim is opposite to that which we have previously considered. Hence the teacher in developing this phase of his instruction must assume an entirely different point of view from that which engages his attention in the habit-building phases of instruction.

Concerning the way in which the mind works in these higher mental processes, educational psychology and experimental pedagogy have as yet much less definite to offer than in the field previously discussed. Yet the results obtained in the experimental psychology of the thought processes justify a few practical and basal conclusions.

a) Chief among these is the fact that we think definitely and clearly only when we have a problem that compels such thinking. Ordinarily our mental processes go on without much effort and largely in a mechanical manner, but this process is changed as soon as some obstacle is placed in our path, and the greater this obstacle is, provided that it does not plunge us into a state of emotional confusion, but is capable of being surmounted, the more developed the thought and the richer in content our mental states. The first important principle for the teacher to keep in mind reads, "If you wish to make the pupil think, confront him with some difficulty; present to him something that breaks up for the time his habitual modes of association and behavior."

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How small a proportion of our teaching is of this thought-producing type; how few are the genuine problems that we present in a large part of our instruction, I am sure a little reflection will make evident. I have recently been informed by one who is making an extensive study of methods in secondary education that in the teaching of such subjects as physics and chemistry even the tendency seems to be (if the textbooks employed are accurate indications of the character of the instruction) to insist on the performance of a definite number of experiments in the laboratory, without apparent reference to the fundamental significance of these experiments and an attempt to relate them to the basal principles of the science. If this is true in the teaching of subjects that are so admirably suited to the stimulation of genuine thinking, how much more true is it in other departments of instruction where general principles do not lie so near the surface.

b) It seems probable that the most effective obstacles to the formation of habitual associations are those that are presented negatively rather than positively; that is, we hesitate and consider more carefully when we are told not to do something than when we are given a positive instruction. For example, the subject of an experiment is told that when a picture is presented to him visually he is to respond by a word naming the principal object in the picture, and in this case, while his responses are limited to one particular variety of reaction, and thus not entirely free, they are likely to be definite and ready and not to develop much debate or choice. On the other hand, if the subject is instructed that on seeing the picture he is to reply with anything that comes into his mind with the exception of giving a name to the objects in the picture, his mental processes are much more likely to be raised to the plane of deliberation and decision.

The teacher may on occasions advantageously avail himself of the principle of "negative instruction," as it has been termed, to develop thought. He should accustom his pupils, when there are real problems to be solved and intelligent decisions to be reached, not to follow the most obvious paths, but to hold in check the ready associations that tend to arise in the formation of "snap judgments" and superficial generalities. There are, perhaps, no subjects in the secondary-school curriculum in the teaching of which

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this principle may not be applied, but it is particularly important in the interpretation of the facts of history and political and social science, and it can be brought into play in the comprehension of literature, music, and art. We ordinarily treat facts and principles in conventional ways; we are too ready to accept easily formulated opinions; we do not insist enough on a reasonable hesitancy in judgment.

c) It is often desirable to check the habitual flow of ideas not for the purpose of developing logical conclusions, but rather to give to the thought processes a richness and a variety that they do not possess on the lower levels of superficial association. We know from experimental studies that such a checking in the habitual attitudes of mind takes place when associations can no longer flow along in merely verbal channels. It is under these conditions that definite concrete imagery arises to give a body and a significance to the thought processes. It is particularly desirable in teaching such subjects as literature, where appreciation rather than logical judgment forms the goal of instruction, that vivid concrete imagery be developed. Much of the finest in descriptive and narrative literature is passed over unnoticed unless the essential pictures underlying the words and giving to them their significance arise in consciousness. I am sure that we would often be surprised to find how poor in concrete detail are the minds of many of our pupils.

The necessity of arousing vital imagery applies to a greater or to a less extent to all those subjects of instruction that are to be comprehended in concrete rather than in abstract terms. In ordinary teaching there is altogether too much mere verbalizing and too little detailed comprehension. The teacher must at times place obstacles in the way of these merely verbal associations, if he wishes to get the most significant values from those subjects that cannot be understood in their abstract and formal relationships. He must state his problems in such a manner, he must formulate his questions in such a way, that an appreciative attitude will be engendered in the minds of his pupils.

d) It has been adequately shown, not only that problems are necessary to engender thought, but also that the direction that the thought processes take varies in terms of the nature of the problem.

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Both experiment and observation warrant the conclusion that we generally find that for which we are looking. When our minds are "set," either consciously or unconsciously, in a certain direction, our thinking follows that particular direction, and the details of our conscious processes flow along in a very definite channel. Our associations are formed in terms of our purposes, our intentions, our interests, our ideals, our prejudices. This natural tendency of thought has been aptly termed by James the "will to believe," and its existence has been clearly demonstrated in recent studies on the higher mental processes. This set of the mind may be technically termed an attitude. Attitudes of this nature appear to be of two different kinds. They are either definitely intellectual or are strongly tinged with feelings, and in the latter case they may be appropriately termed prejudices.

It becomes the business of the teacher to instil in the minds of his pupils the proper intellectual attitude and the proper feeling attitude (the prejudice). Sometimes he must make these attitudes clear and definite in the pupil's mind by raising them to the level of problems to be solved; and sometimes, on the other hand, he may convey through suggestion the attitude that the pupil is to take. In the more definitely intellectual work of the school the explicit problem attitude should be cultivated, but in the work that depends on appreciation and comprehension these attitudes are better suggested than explicitly stated. In any case the teacher should see to it that such attitudes are present in all of the school work that has for its aim either rational interpretation and comprehension or emotional appreciation.

The teacher must take special care to set different problems, to stimulate different points of view, to develop different feeling attitudes with different subjects of instruction. Too often the teacher approaches all subjects with the same general attitude; yet it is perfectly obvious that each subject or group of subjects in the curriculum must have its appropriate method of approach. Obviously the attitude in studying literature and art cannot be the same as in studying natural science; the attitude in which history is studied is not that which will work with equal success in studying a language, and so on. Further, the approach to a subject

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often varies with the general purpose and with the grade of the instruction. The secondary school should not employ, for example, the same methods as those used in the university, nor should it make the equally fatal mistake of carrying over the attitude of the elementary school. The teacher must have definitely in his own mind the attitude that may be properly assumed in regard to the subject that he is teaching, and he should know likewise how to vary this attitude from time to time in accordance with the differing demands of different phases of his subject and of the different stages of progress of his pupils. At one time he may hold up the ideal of critical analysis, at another of subtle appreciation and sympathetic comprehension, this variety of attitude depending on the particular aspect of the subject that he is teaching. In any case, he must definitely formulate his own attitude and impress it on the pupil.

e) In developing proper intellectual and emotional attitudes in the mind of the pupil the art of questioning is of vital importance. Questioning may serve two quite different purposes. A question may be employed merely as a stimulus to set off a ready response, as, for example, in the common word-reaction experiment, when the subject is presented with a word, either visually or orally, and instructed to reply with the first associated word that comes to mind. Experiments of this kind have shown that under normal conditions the replies are generally superficial and without special significance; they are opposed to genuine thinking. Such questions as these are suited for the drill work in the school. They are asked when our aim is to habituate the pupil in certain forms of association and to further mechanize a relationship that has already been definitely established. The measure of proficiency under such circumstances is not deliberation but facility in response. In this case the rapidity as well as the accuracy of reply is the measure of the extent of the learning. "Rapid fire" drills and oral quizzes are illustrations of this type of questioning. The aim in the second class of questioning, however, is quite different from this. The latter has for its purpose the development of thought, and the test for genuine thinking is not ease and rapidity in forming associations, but generally quite the opposite. The skilful

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teacher who questions with the latter purpose in mind will not rest content with the glib and ready answer to his queries. Under proper conditions the attitude of the pupil will not be that of replying as rapidly as possible with the first idea that arises in his consciousness, as in the case of the simple reaction test, but he will reply only after comprehension, comparison, and decision. The ready answer is often as much an indication of a lack of real knowledge as no answer at all. Recent detailed studies of the conduct of the recitation have shown serious defects in the way in which the questions are framed by the teacher and answered by the pupils.

Miss Romiett Stevens, who made an investigation covering a period of four years concerning classroom practice in the upper grades of the elementary school and in the secondary school, has shown a truly astonishing state of affairs in regard to the extent and the character of the questions asked, not merely by the poorer but by the better teachers. This study is published in the *Teachers College Contributions to Education, No. 48*, and should be read in detail by every teacher who is seeking to correct faults and arrive at better methods of instruction. Particularly instructive are the detailed stenographic reports of typical lessons that are incorporated in the monograph.

Miss Stevens has found that it is not uncommon in a single recitation period covering forty minutes for the secondary-school teacher to ask as many as one hundred and sixty questions. Many of these questions are of the "pumping" type; some seem to be merely an ingenious game in supplying a missing word and assume the character of the so-called "completion test." Generally there is shown very little effort to develop thought or to lead the mind of the pupil in any definite direction. The questions are often badly formed and not infrequently trivial in their nature. Neither pupils nor teachers seem to know where they are going; they are simply conscious that they are on their way. In Miss Stevens' opinion, "the large number of questions suggests the maintenance in the classroom, for a considerable portion of the time, of a highly strung nervous tension when there should be natural and normal conditions." It also "suggests that the teacher is doing most of the work of the class hour instead of directing the pupils in the doing."

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There is an over-emphasis on memory work; there is not enough opportunity given to oral expression. The teacher does not take time to frame carefully worded questions, nor does he demand accurate and properly formed replies. Miss Stevens concludes that except in certain drill exercises a large number of questions is an indisputable index of bad teaching; on the other hand a small number of questions is not a proof that the teaching is good. Not only must the questions be relatively few, but they must be well framed and have a clearly defined purpose in view.

f) While the teacher should strive to develop in the minds of his pupils as many helpful attitudes as possible, there is one above all others that he must keep in the forefront of his endeavor. This is the attitude of reasonable self-criticism, the lack of dogmatic assurance, so necessary in all intellectual progress of a high order. The mature learner must always subject his own efforts to such criticism if he hopes to make substantial advance in independent learning and this attitude of mind must be inculcated in the pupil who has progressed beyond the mere rudiments of learning. The teacher, however, cannot expect the pupil to assume this attitude unless he exemplifies it himself. While of necessity he often speaks with assurance and authority, he can never with safety assume the rôle of the dogmatist with pupils of the secondary-school age. He must give the impression that he too is a learner, who stands ready to correct his opinions and reform his judgments when necessary and who is an earnest seeker for the truth; that he is one who in all questions that require deliberation is willing and ready to "think things out" with his pupils and be a sharer in their efforts to arrive at the ultimately valid. There is nothing more stimulating to the pupil than this genuinely thoughtful attitude on the part of the teacher. It cannot be successfully simulated, but when it is actually present it infects the pupil with its fine enthusiasm, and touches with its subtle magic even the dullest minds in the class.

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IMPROVEMENT IN EDUCATIONAL PRACTICE[1]

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A little time ago the Sage Foundation of New York published a comparative study of public-school systems in the forty-eight states, an epitome of school facts in tabular and diagrammatic form of the greatest value to a general knowledge of educational conditions. The last page of this study gives the comparative rank of each of the forty-eight states as determined by ten educational features: the number of its children of school age who are in school, the value of its school plant, the actual expenditure per child, the aggregate school days per child in the state, the length of the school year, the average days of attendance per child, the relation of the state's expenditure for public education to its total wealth, the daily cost of the education given, the proportion of its pupils in high schools, and the average annual salary of the teachers in each state. It is, I think, safe to say that such a volume of information upon education has never before been compressed into so few pages or set forth in more lucid form.

It is interesting to ask, does this masterly statistical study tell the whole story of the condition of education in the United States? Does it indeed tell the most important part of it? Does it show the relative value of the schools? The heart of the school is the quality of its teaching. The figures are undoubtedly valuable for all that they set out to prove. They do not reveal the actual state and condition of education, though they do tell us a great deal about the conditions which surround it. A relatively low proportion of children of school age actually in school may, it is barely possible, represent a high degree of intelligence on the part of the parents of the non-attending children, for the main thing about a school system is what it does for its children when they come to

[1] Read at the meeting of the Harvard Teachers' Association, Cambridge, Massachusetts, March 15, 1913.

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school. Expensive school plants may reflect merely a community's pride and desire to promote and advertise itself by erecting good public buildings. In the last analysis a school is a place not built with hands. Liberal expenditures for schools are not altogether incompatible with poor teaching. A long school year may represent a poor condition of instruction, a high average attendance may be due pretty largely to an efficient compulsory attendance department, a high proportionate expenditure for instruction may represent a community's pride or reckless wastefulness, for a thing is not necessarily good because it costs a great deal. It is rather apt to be bad for that reason. Relatively large numbers of students in secondary schools may be due to the presence of colleges or the absence of factories, and not guarantee that those who attend upon high-school instruction are being profitably educated. Those who are familiar with school affairs know that these are more than captious statements. The real school is behind all these appearances. The real educational welfare of the community persists in depending chiefly upon one thing—the kind and quality of the teaching which is given in the schools. Is there any one of these standards which measures and compares that? Each of them, if we could analyze it deeply enough, might be found to have a bearing upon that central fact and in some sense to proceed from it, but as they stand they do not give a satisfactorily clear report upon this most important matter.

But one of these standards reveals a great deal more about the state of the teaching, and therefore the quality and efficiency of the schools, than the others. That is the one which reports the salaries of the teachers, for it is just about as certain in teaching as in any other occupation that poor pay means poor hands and poor hands mean poor work. Indeed, it is rather more true, for real teaching is a kind of spiritual radiation which only a relatively healthy, enthusiastic, and achieving personality can give forth. The community or the state which places a low value upon the services of its teachers forces them as a body to hold their service cheap. But is the reverse true? Is a high rate of pay for teaching an infallible indication that the teaching is good wherever the pay is high? By no means. Some of the cities of the United

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States which pay the highest salaries have poor teaching. Something must be added to good salaries to insure good teaching, even when only good teachers are employed to give instruction in the schools. The first of these necessary things is a good system of school administration, for a badly conceived plan of school management will breed distrust, feverish worry, and finally chaos, in the best teaching staff that can be assembled. Next after a wholesome and efficient plan of school administration comes good and inspiring leadership, and this is vastly important, for a good general will make an army out of poor material and will win victories with it, but a poor general will demoralize and prevent the best troops from winning a campaign. He contributes two things—*esprit de corps* and leadership. But right here our figure breaks down. The undertaking of the general and his troops is relatively simple. There cannot well be two views about the nature of their object, but in the ceaseless war which humanity is waging upon ignorance there are unfortunately many views as to what victory consists in, many counsels as to the form and substance of successful warfare, and no clear single battle cry. I conceive that one may be a good teacher, a good principal, or a good superintendent of schools in the commonly accepted sense of the term, and yet hold a philosophy of instruction and set before himself ideals of attainment and follow methods of procedure which make his daily work little short of atrocious. Perhaps in no other calling is the good so thoroughly the enemy of the best as it is in the calling of the teacher.

Mr. Chesterton has said that by far the most important thing for one to know about any man is the kind of philosophy he keeps. If a landlady is renting a room to a lodger, he says that the most important thing for her to know about him is not what his income is or his bank account is, but what his philosophy is; that when a general is about to fight a battle with an opposing army the most important thing for him to know about the army he is going to meet is not how big it is, nor who is in command, nor even what its plan of campaign is, but what kind of a philosophy is in the being of its soldiers. There can, I think, be no doubt of this. The most important thing at all times about any man is the kind of philosophy

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he keeps. And by far the most important thing about any school system is the kind of philosophy of education which shapes the purposes and the activities of its constituent members.

Unfortunately there are many philosophies of education and most of them prevent what they undertake to accomplish. Anyone who is in close touch with educational practice will agree that there are at least three different kinds of schools with three different kinds of philosophy determining their teaching. The first kind of school believes that the great thing is knowledge. A few learned and peculiarly fortunate adults have it, most haven't it, and children never have it save as it is given to them. It is stored up in books, in courses of study, in the minds of teachers and other learned folks. The business of education consists in taking knowledge from the places where it is and putting it into the places where it is not—the empty minds of children. Schools are retail stores of knowledge and universities exist to conduct a wholesale trade in it. The best books and the best courses of study have put it up in properly weighed packages and carefully prepared doses which must be taken, one kind after the other, at regular intervals until an education has been administered. Recitations must be held to find out whether or not the daily dose has been taken—memory must retain it. Curricula are required to indicate the quantity which can be compressed into the memory of a school child. That superintendents and principals may know that teachers and pupils are handling the required stint of it, that teachers and parents may know that pupils are stocking themselves with it and retaining it in undiminished state, and that the children themselves may know how much they know, examinations are held with great frequency and regularity and all that has been accomplished is weighed and measured by them. This is the knowledge conception of education and a school system which is devoted to it is called an examination system of schools. An old and honored gentleman of my acquaintance once told me of his own theological training at Princeton fifty years ago. "Every morning," he said, "the professor brought our meat to the classroom cut up into nicely prepared little chunks all of the same shape and size. Then he handed them to us to take and two days afterward he looked

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into our stomachs to see that we were retaining them in just the same form in which he had given them to us."

There is a right wing of educational philosophers who have recoiled from the crudities of this practice and have set up in opposition to it a conception of education which forsooth has little to do with knowledge but exists solely to train the mind. The mind, they say, must be exercised and strengthened, the wit must be sharpened before it is ready for its real work. Nature never intended that any man should do any real thinking with so crude, ineffective, and blunt an instrument as a mind that had not first been patiently exercised, strengthened, and sharpened for its work. One must eat sand before he can digest. Mental exercise is the great thing in education. Its aim is the symmetrical development of all the powers of the mind. Education, to be of universal value, must not be concrete, for that would particularize or partialize it. It must not allow itself to be limited to any one content, for it aims to impart a mastery of all. It must therefore confine itself to elements which appear in all contents. The only elements of a genuinely universal sort are the forms or symbols of knowledge. The mind must therefore be exercised upon these. To train a thinker one must be very careful that his mind shall have to do not with thoughts but only with the forms of thought while it is being educated. This is insured only by a long period of contact with certain studies which contribute nothing of much value in themselves, but exercise upon which puts the mind through its paces, and inures it to great activity by means of a well-ordered series of exacting, uninteresting, and in themselves meaningless tasks. This is the disciplinary philosophy of education and the schools which express it are mental-exercise schools.

The third kind of school believes both in knowledge and in mental training. But for it they cannot be separated. Knowledge for it is no ready-made outside thing which by any conceivable legerdemain can be put inside the mind; on the other hand, the mind is not so constituted that it can take strength by being exercised upon the forms of knowledge. Men made knowledge by thinking and there is no part of the knowledge which they have made which is final and not open to improvement by the

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same means. To get knowledge the student must do as its original discoverer did; he must rethink it, remake it. It makes no difference what Moses thought or Plato thought or Euclid thought, until I think their thoughts for myself as my own. Science, history, literature, mathematics, all must be born anew in the mind of each student who studies them. Books are of value, courses of study are of value, and teachers are of value, not because they do our thinking for us, or insert knowledge into our otherwise empty minds, but solely because they help us to know what matters the race has found it most profitable to think about and put us to work at thinking about them. As there are no exercises known to gymnastic teachers which train the body as a whole but only those combinations of muscles actually engaged in them, so these thinkers believe there are no mental exercises that train the mind as a whole but only the specific activities which are at work. Whatever mental training results is always a definite ability to repeat its functioning upon a similar content. In other words, the training which we are able to give our minds is always a relatively definite content training and never a general formal training.

Education, according to this school, has one sole object, the using of the mind, not the getting of knowledge but the making of knowledge; not the exercising of the mind, but the using of the mind. I have said that this is a contribution which philosophy makes to education. It is distinctly the province of philosophy to point out what its sound first principles are. The question, What is knowledge, or how is knowledge possible? has engaged its most critical attention. It has an answer to that question and its answer is that knowledge is not and cannot be a given, but must be a construction. It is also the duty of philosophy to explain the behavior of mind and to make clear under what conditions it functions. The debt of sound education to philosophy is great, but the debt of philosophy to education is even greater, for it was one of the first discoveries of philosophy that its mission is to heal the soul, that is, that philosophy exists for the sake of education, that its one function is to assist the mind to a proper guidance of itself.

Is there any pressing need that the lesson which philosophy

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teaches concerning the nature of knowledge and the behavior of intelligence shall prevail in the schools? No need is greater. It, and it alone, will clear up the confusion in educational theory. The object of education, we are told, is morality. Other counsels insist that it is preparation for citizenship, others that it is culture, and still others that it is to fit men to make a living. But the prime object of education is none of these things, though its secondary object is all of them. Its prime object is to make people use their minds, and if they are constrained to use their minds they will inevitably use them on the greatest concerns of life, morality, citizenship, culture, and productive activity. Or if education seeks first the kingdom of the spirit, all things else will be added unto it.

Better teaching, as I conceive it, consists then in setting our faces resolutely to the goal of requiring our students to use their minds, not to exercise them but to use them, not to fill them with knowledge, but to use them in making it each for himself. This is an old doctrine. It was Socrates who made this discovery, but if we took it seriously today it would work a Copernican revolution in what we are doing. What would it do for the teaching of mathematics? Herbert Spencer dared to "doubt if one boy in five hundred . . . . knows his Euclid otherwise than by rote." Does the proportion read the other way today? Yet Professor Young has pointed out that it is no more profitable or educative to commit the theorems and demonstrations of geometry than it is to commit the names in the city directory. Has our teaching of science, from which so much was expected, engendered the scientific mood in our students; does it lead to a scientific habit of mind; do those who pursue it acquire scientific method and learn to systematize knowledge, or do they instead merely learn a few facts which have been systematized? Professor Mann has announced his conviction that better results will not come from the teaching of physics until the teachers have a better philosophy of the teaching of that subject, and in the last number of *Science* he indicates quite clearly what he means by that. Take the venerable subject of Latin, which in the days of its larger functioning furnished such great and profitable opportunities to be active-minded to the

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students who pursued it. It is my duty to see a good deal of high-school instruction, and what I have seen of the teaching of this study is not reassuring. I entered one classroom while the class was engaged upon that passage of the oration for Archias in which Cicero attempts to make the thoughts of his auditors rise to the nature of the poet's mission. To do so he quotes the words of "our" Ennius, author of the *Annals*, the father of Latin poetry—the poets are holy, for they seem, as it were, to be approved to us by a special gift and favor of the gods. I waited to hear what sort of a question the teacher would ask on such a passage as that, and it came: "Why is *videantur* in the subjunctive?" I went into another class in another school where they were reading the fourteenth chapter of that first book in which Caesar tells that the German chieftain Divico and his retainers came to a conference, and how Caesar addressed them, saying that they ought to be peaceable and give him hostages that they would be. Whereat the German chieftain arose and said that their fathers had taught them to receive and not to give hostages and he broke up the conference. I waited here for the question which the teacher would ask, for from that German love of liberty which would not submit to be crushed out by mighty Rome herself, much that we hold dear has come down to us, and there in that remote forest two mighty forces in civilization confronted each other for a moment and expressed their opposing ideals, and the question came: "What mood follows *uti?*" I went into another classroom in another school, where the students, who were beginning the Latin grammar, were engaged in writing a synopsis of the verb upon the blackboard. The work was going well, but one student attempted to write a perfect imperative form and that disturbed the peace of the occasion. When the teacher saw it, her reproof took the form, "You know that there is no such form in the book. You must follow your authority. Watch it closely and don't let this happen again," in place of calling attention to the impossibility of giving an order today to be carried out yesterday. Yet on the whole these were good teachers, who were doing the thing that was expected of them. Nothing so completely convinces one that what is wrong with our education is not the students nor yet the

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studies which we attempt to teach, though some of them almost seem to have been chosen for their peculiar power to dull and stupefy the mind rather than their serviceability in interesting, occupying, and training the student who must pursue them. What is wrong is the teaching. It pursues the wrong methods, though the difference between a study pursued by wrong methods and the same study pursued by proper ones is the whole difference between perverting the mind and educating it. And it pursues the wrong methods because its philosophy of the meaning and function of the subject which is taught to the student is poor and mean. The case is not otherwise in the elementary school. We teach our pupils how to read but not to read. We teach them how to write without allowing them to desire to write well. They learn to perform the processes of arithmetic without comprehending their significance or the occasions for using them. We teach a schoolroom manipulation of language, called grammar, but it does not seem to reach beyond the schoolroom. Our geography tends to be an exercise with very confusing and difficult names, while history is a dry study which students commonly get by heart. How can we get better teaching of each of these studies save by remembering that there is not only a philosophy of instruction as a whole, but that there is a philosophy of each study, a body of considerations as to its meaning, the object to be sought in teaching it, the parts of it which are to be reduced to terms of habit and the parts of it which must abide in comprehension, and this philosophy of the subject or the course indicates the value of the subject to the pupil and reveals the method by which it must be presented?

We have been discussing the importance of weighing and measuring the results of instruction, of establishing standards of measurement and mathematically determining the uniformities of education, of making it an objectively valid science by introducing precision in the calculation of its causes and effects. All this is good and greatly to be desired, but there is danger that we shall overlook the fact that it is instrumental after all, that it is only a method of giving more exact definition to what we already know and do not take seriously enough to put into practice.

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Mathematics will never tell us what the nature of knowledge is, though it will help us to find out whether we have it. It will never tell us the different ways in which the mind works, though it will tell us whether it is producing certain results. Mathematics will not tell us how to get *esprit de corps*, but it will help us to detect its presence. Just as the navigation of ships was made possible by the invention of the compass, and all the refinements of navigation which have since been developed have been built around that central discovery, so and not otherwise is it in education. Its central discovery is the self-activity of the student, that the one object and mode of education is through enabling him to use his own mind; and all else that can be known about education has for its object the application and the utilization of this principle. If each one of us could have a sort of Damascus road experience, or in some other way be converted to a sound philosophy of education, it would do for us exactly what it has done and is doing for that daily increasing company of men who from it have caught the glamor of the kind of teaching which ought to be and is to be because it ought to be; it would set us to work as it has set them to work, resolutely, at the task of clearing roads through the jungle of methods, courses of study, and profitless and uncertain educational practices and advice, for the self-active spirit to walk in.

There are two sides to human experience, a habit side and an accommodation side; or two means by which the human being maintains his adjustment; one is repetition and the other invention. If he depends upon either one of these alone his situation soon becomes perilous. Education as an art is not quick to improve itself; when it is not highly charged with theory, and is not keenly alive on the inventional side, it sinks into the dull automatism of habit and forgets the very thoughts which prompted it. Theory or thinking about its task rouses it to life again and sends it hotfoot in search of ways to improve its service. Education started in Greece with a great concern for theory. When it got as far west as Rome it lost its theory for the most part and lapsed into the automatism of an established institution. Since that time it has become conscious of its activity at times, but only locally and occasionally. There is therefore great promise in the present

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world-wide movement of investigation to convert it into a science. But the greatest advantage of this movement will be its vitalizing effect upon educational practice. Hitherto the advance in theory has been real but it has been too sporadic effectively to quicken practice. Now that a renaissance of teaching is on, not only will it produce new results, but discoveries which have been far too much neglected will be brought to attention and put to work. Among them is the important rediscovery of the heuristic method which Professor Armstrong has been championing so valiantly in England, and Professor Young in the United States. Another is the laboratory method of teaching mathematics so skilfully employed by Professor Perry and authoritatively supported by Professor E. H. Moore. The largest outcome of all in the direction of method, according to Professor Henderson, is the use of the problem to educate the reason. If we employ the method of casting all that we would teach or study into the form of problems and of provoking our students to do the same, much is gained in making teaching a co-operative undertaking in finding; the mind is challenged, attention is focalized, work becomes definite and has an understandable purpose, searching is made necessary, valuing or selecting becomes the order of the day, what is found out and thought out is organized with reference to the problem, each student shapes and offers his contribution in his own words, and, above all, each is thinking for himself upon matters of common interest, which is the only valuable training of individuality. This life-giving method of using the mind in studying is clearly set forth in Professor McMurry's book, *How to Study*. No more effective contribution to better teaching has as yet been made.

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THE PROBLEM OF WASTE IN THE COLLEGE LECTURE[1]

CHARLES F. RICHARDSON
Dartmouth College

A distinguished Harvard man, your friend and neighbor, Colonel Higginson, once said in a valuable little book, *Hints on Writing and Speech Making*, that one should never carry a scrap of paper before his audience. Another distinguished Harvard alumnus, who was the most effective speaker for many years in the General Convention of the Protestant Episcopal Church, when he was speaking under a ten-minute rule, and at the close the bell sounded, and everyone said, "Go on, go on," declined so to do, making the statement that a man who could not say all that was really necessary in ten minutes had no right to speak one. Now between those two bits of Harvard advice I am somewhat confused. I think, however, that I will take the second, if I may; and for the purpose of keeping as near ten minutes as possible I will presently bring a few scraps of paper before my audience. I am very glad, let me say, that Dr. Huntington's suggestion was not carried out by my predecessors; but evidently it belongs to me, speaking rather late in the afternoon of a rich day.

Now, sir, notwithstanding your too kind introduction, it might seem, and to me it does seem, absolutely fatuous to try to say anything new concerning lectures, here where so many have been delivered, and where at this moment I am sitting between lecturers of far greater competence than my own.

Didactic instruction is as old as humanity. When the first human said anything in the way of information to another, he delivered a lecture; and the last human remark, before everything caves in, will, I suppose, be a lecture. There were lectures in Palestine which influence us today, or will tomorrow, at any rate. Greek instruction was in the form of didactic lectures.

[1] Read at the meeting of the Harvard Teachers' Association, Cambridge, Massachusetts, March 15, 1913.

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The lecture came all the way down through the mediaeval university. The word "lecture" is the regular expression for instruction in the English universities and in some American institutions, peculiarly those in the South, which have followed, or striven to follow, English lines. I remember a book published in England which put the word "recitations" in quotation marks, as indicating our method of instruction here—a method which was actually so unfamiliar on the other side that it needed to be characterized by inverted commas. We have had, for seventy or a hundred years, professional-school lectures. I have my father's notebooks of lectures in the Harvard Medical School as far back as the forties. Later, as you all know, and I don't need to dwell further upon this fact, we have had most successfully—and nowhere, I take it, more successfully than right here—the university lecture to graduates, and in somewhat less degree the undergraduate lecture to those of greater youth.

My sole topic, however, is the college lecture, and not the college lecture in general, but the limitations and failures which are connected therewith—the outs rather than the ins. And here, finally, I have no personal right to speak, but the circumstances of my twenty-nine years at Dartmouth have given me, perhaps, a rather vague fitness to speak a word for those circumstances.

Let me say, very briefly, that I began in a small, poor, ill-equipped, and isolated college, and I left two years ago a large, still not rich, reasonably well-equipped, and of course more or less isolated college. At first, with an imperfection which I know very well, I did all the teaching in the English department, and left undone a great deal more than I did. At my departure there were a dozen competent instructors to take up the work which I had imperfectly tried to perform for nearly three decades. The circumstances of the case, therefore, rather than any competence on my part as an observer, enable me to see the progress which may be made, or the retrogression which may appear, in a college which is passing from an almost strictly recitation system to a partially developed lecture system.

And let me also say, once for all at the start, that I heartily

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believe in the lecture as a means of undergraduate instruction. I have got, with imperfect powers, better results from it than from textbook work; and am fully convinced that every college teacher should be able and willing to assume the pleasures and responsibilities of this mode of instruction, asking only for the opportunity to get at a great roomful of students for a series of hours. The ideal, the counsel of perfection, is the untrammeled lecture, guarded only by an examination at the end of the course. So much for the positive, for the optimistic, side.

Now let me turn for my remaining few minutes to the negative and somewhat gloomier, possibly superficially pessimistic, side. For, as I said, I am to discuss the outs rather than the ins of the case, and try to consider a few remedies for unquestionable evils encountered in certain kinds of courses or by certain kinds of instructors.

We all know that the "college man," as he calls himself, is at first a schoolboy, unfamiliar with lectures, on the one hand, or tutors, on the other. You recall the almost classic remark of Dean Briggs to the effect that a collegian claims to be a man, acts like a boy, and then reminds his somewhat confused instructors and guardians that they have forgotten that he is only a boy after all. The college man or the college boy, again, is often lazier than he was before or ever will be again—lazier, I take it, than under the German or the English tutorial system. He does not seem to grasp the ideal which is in the lecturer's mind. That ideal might be described in the words of a definition of the declaration of absolution once given by a High-Church Episcopalian. The definition ran as follows: "The declaration of absolution is an authoritative act of the church, sown broadcast to take root where it will." Well, I wish that answered rather better for the college lecture. But to continue the ecclesiastical figure: when the seed is sown broadcast the college lecturer too often goes on to think of weeds and brambles and stony ground and fowls of the air and other things which interfere in truly biblical fashion with the desired fruition. The facts of the case as regards the falling of the lecture upon the undergraduate mind are too often more accurately described in the words of a clever parody of Walt Whitman, which

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the brilliant Sir Arthur Quiller-Couch wrote for the *Oxford Magazine* when he was an Oxford undergraduate. The first lines of that parody ran as follows, and they may well be put into the mouth or into the mind of many an American undergraduate:

> Behold, I am not one that goes to Lectures or the pow-wow of Professors.
> The elementary laws never apologize; neither do I apologize.
> I find letters from the Dean dropped on my table, and every one is signed by the Dean's name,
> And I leave them where they are, for I know that as long as I stay up
> Others will come forever and ever.
> I am one who goes to the river.

So that we encounter the student who does not care for our lectures or the pow-wow of professors, but prefers very much to go to the river, or what corresponds to the river in the inland colleges. That is to say, the modern average student—one of the perils of prosperity in a college—wants things, he says, in black and white, if he really wants anything at all. "If the lecture," he says in substance, "is poorer than the textbook, don't give it; if better, why don't you print it?" To which the poor lecturer somewhat feebly replies, "If the textbook is all, have at your bed's head twenty books clad in black and red, and don't go to college or university at all."

But as regards our subject, the very first element of waste that occurs to me is from the undergraduate's inability to take notes. That very interesting story which President Eliot told this morning of the lack of perception on the part of certain Boston clubmen reminded me of the old "Eyes and No-eyes" story, which we might expand into ears and no-ears, of the very first book I ever owned, the *Evenings at Home* by Mrs. Barbauld and Dr. Aikin. We think we see; we pretend to hear; but when we start to jot down things in notebook form we don't always succeed as well as the speaker desired. If everybody had taken notes of the wisdom which we have heard today, prior to the unfortunate time when I arose, I am not perfectly sure that all that the speakers said would have been permanently preserved exactly as they would have wished.

The schoolboy who goes from the "prep school," as he calls

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it, to the college or university has sometimes a startling inability to take notes, and an equally depressing inability to appreciate the points which the lecturer tries to make. He determines to work the thing up later; or he says, "I believe I will run my chances." The worst of it is that the "soft snap" becomes softer still as we approach the realm in which the instructor most earnestly, but not always successfully, seeks to develop appreciation. To another body of teachers the other day I was quoting Professor Trent's remark on teaching the spirit of literature, in which he said, with a great deal of truth: "One should merely get a primer of English literature and then add to it sympathetic readings." That fits the undergraduates. But sympathy, when the instructor tries to elicit it, is sometimes received by the student, when you ask him what he has really got, with a courtesy which is not always a precedent condition of subsequent results.

Hence there is a certain misfit between the lecturer and the undergraduate writer of an examination paper; because we must have some tests, I suppose we all would admit. For instance, in overhauling the gems on both sides which I collected for twenty-nine years, I have found the following. And let me frankly say that sometimes the instructor is gratified by an unquestionably original remark, or written observation, by a student, which is actually as good as a Sainte-Beuve or a Matthew Arnold or a Lowell might have written. It generally doesn't go beyond a line or two, but sometimes you get it. On the other side, our cheer is dampened by such experiences as these. In those poor old days, when I was trying to do everything and leaving more things undone, I once had a course in Middle English, in which certain parts of Wycliffe's Bible constituted the textbook, and I gave a lecture on the Bible considered as literature—rather a large subject for a single lecture—in which I reminded my students that we were to consider that incomparable body of writings as a library, not merely a book; and that in all reverence, whatever our views of inspiration, whether Roman Catholic or Protestant, whether conservative or liberal, we should remember to read those books perfectly frankly and fairly, not trying to read Exodus as we should read Isaiah, or Leviticus as we should read James. In point of fact—

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I said with such earnestness as I could command—there would be no irreverence in declaring that the Book of Esther was, as it were, an idyllic novelette; Numbers, a census report or book of statistics; Leviticus, a law book; the Psalms, a sort of Hebrew *Golden Treasury*, and Isaiah or Revelation, a great poetic foretelling. Well, a man of great football prowess listened to me and informed me, when he came to the examination replies which were supposed to cover that lecture, that the Bible was "a book of foretelling dreams, an idolic novelist, and a book of statics." A certain element of waste was exhibited there.

I once gave a lecture, which I won't summarize even as briefly as I did that on the Bible considered as literature, on Bunyan and his great work; and a student derived from it the information that Bunyan's great work was successfully to set forth, in remarkable literary form, "the terrible doctrines of damnation and salvation." I spoke of a certain delicacy in the nature and in the poetic work of the author of the "Elegy in a Country Churchyard," and was told at the end—all things come round to him who will but wait—that "considered as a man Gray was an old woman." Continuing to learn with reference to the literature of the eighteenth century, it was a matter of instructive information that "Tom Jones was the first novelist" of that century. And occasionally, in this same wastefulness, your sapient undergraduate will made a grand combination such as that in the mention of Poe's "The Rape of the Lock" and "The Fall of the House of Russia."

Are these arraignments of the lecture system only? Not at all, because in justice we should remember that almost as deep stupidities emerge from the recitation system. I have been quoting these from memory in preparing this little talk. A man after a recitation exercise, based, in the ancient years, on Taine, when I thought he got the idea, said, "The Anglo-Saxons were a brutal, pious, philosophical people," which seems to me to be a pretty good summary, after all, of Taine's celebrated chapter on the Anglo-Saxons.

Another bit of inaccuracy, after a course in which a very large textbook of my own was employed, was the mention of Whittier's fine poem "The Old Open Bucket." In the same course, sixty

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printed pages by myself, in the student's hands, left the impression in his mind that Hawthorne, "although not strictly to be called morbid, was not an exceedingly jocular poet." And my chapter in my *American Literature* on Longfellow, expounded for a week, led another youth to say—we had been speaking of the meter of "Evangeline" and the meter of "Hiawatha"—that "Longfellow was the first writer successfully to use metrical verse."

Well, now, you see we have been turning from the lecture system to the textbook system, and we find an element of waste there. And if we were to turn to the sacrosanct preceptorial system I think we should find an element of waste even there. A very industrious and praiseworthily successful preceptor in my last year at Dartmouth, after a week devoted to his favorite subject, the Book of Job, in the incomparable King James Version, got the information from a student that the subject of that book was the flood and Noah the central character—a more learned reply than that which another successful and hard-working preceptor got when a student told him that Lot's wife was one of the figures described in the prologue to Chaucer's *Canterbury Tales*.

Dartmouth College happens to be the one of which I know most. I would not for a moment, by these selections, which reach over a pretty long period, leave the impression that the Dartmouth undergraduate is peculiar in the sort of wisdom which he displays before his instructors. Professor Hill of Harvard once said to me that after reading a lot of themes on the play *As You Like It*, I think it was, his mind got so confused that he had to take Shakespeare from the shelf and read the play through to find what in the world it was all about. There may have been at Harvard, as there have been at Dartmouth; there may have been at Yale; there may have been at other colleges, youths whose mentality is not as yet in a condition which can be called perfect.

Some illustrations of the element of waste in the college lecture I have thus informally been bringing before you. There is waste everywhere, and the whole purpose, I suppose, of today's discussion is to try to discover the causes of the waste, and having found the root of the evil, as Chaucer says, to administer the proper educational remedy, partly to ourselves and partly to those for whom or with whom we work.

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But it seems to me that in any college the element of waste in the lecture is greatly increased by using it as an economical makeshift. Harvard College, shortly before President Eliot's illustrious administration, had about four hundred undergraduates. Dartmouth today has twelve or fourteen hundred. And other colleges have grown correspondingly. There is a very strong temptation, when the college grows numerically from 400 to 1,000 and from 1,000 to 2,000 or 3,000 in the undergraduate department, to make the lecturer out of the former teacher in little divisions of twenty or twenty-five—and there I speak feelingly. It is a dangerous and very undesirable method. If you believe in the lecture system get your lecturer and let him do the best he can with it. If you do not believe in the lecture system, don't be forced into such a makeshift as that of turning a man who would be a pretty good classroom instructor, on old-fashioned methods, to talking to two, three, four, or five hundred students, thus setting forth a system in which neither he nor the college would have believed had it had more money.

Now what are the remedies for this problem of waste? Here again I speak very modestly, because the problem of the college lecture is not that of the university, and not that of the preparatory school. It would seem to me, on the basis of my own experience, which is all I am undertaking to set before you, that the first remedy is to catch your lecturer if you can. If he be really in love with his subject and determined that it shall be taught to others, he will be like a torch around which many other little torches will gather in order that they may catch his light.

It seems to me also wise not to begin the lecture too soon in elementary courses.

My third point would be to combine it, especially in such subjects as history or physics, with assigned collateral readings or even a textbook. There is very little difference between the boy or girl in the last years of the high school or academy and the boy or girl in the first year of a collegiate course. The lecture in the high school or academy is an exception. The lecture as the sole or the chief means of instruction in the college or the university is therefore to many a foreign and unassimilatable thing.

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Fourth—and I really think there is a great deal of importance in this little fourth suggestion—put a syllabus on the board. As I said at the start, I think a lecturer ought to be willing to assume the responsibility of making his subject interesting, even without these checks and balances which I am now setting before you. But I think most important of all, more important than everything else together, is a list of ten or fifteen topics which you follow extemporaneously in your remarks, and which the student, whether or not he goes any farther in his notetaking, copies on the blank page before him.

Fifth, in certain cases, don't leave the lecture too long undefended by quizzes—not always, but in certain cases. And I must say that when the lecture courses were about half as numerically portentous as they were in my last three years at Dartmouth, I tried two experiments, both of which were absolute failures. One was, in a course on English literature, to require the reading of Brooke's *Primer*, I then asking ten or twenty questions in the last ten minutes of the hour. That was a complete and a deserved failure. Equally unsuccessful, in a lecture course of one hundred, was the attempt to call on eight or ten different men at the end of the lecture to summarize the points which they had heard just before. Neither of those plans worked.

Sixth, let your helpers be men familiar with your own methods. That is absolutely indispensable.

Seventh, though the examination be the final desirability, sometimes guard it by arbitrary rules of attendance. I think there is no real inconsistency in this, as we have to consider the average man. I am reluctant to give this hint, but I fear that sometimes it is necessary. It seems to me as though the marking system for attendance ought to be utterly inconsistent with the lecture system, but sometimes it is necessary.

Then there is a final matter which time does not allow me, or competency permit me, to discuss at length. I will merely allude to it—namely, the preceptorial system. As I take it—and I shall be corrected if in error—the first suggestion of the preceptorial system was made by President Hyde of Bowdoin. It can be worked well and has worked well in a small college like that. The

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merits of the system at Princeton are enthusiastically described by most of the preceptors and by some of the students, but there is a very serious couple of objections to it. If your diligent student likes the program of give and take, with six or eight others, for days and weeks and months in a little room, your idle student does not; and I am told by Princeton preceptors that it has been found better to have the brighter students together and the duller students together. But that is too large a subject for me to enlarge upon.

There is, however, an economic disadvantage in the system which might not be apparent at Harvard, but certainly would in a college like Dartmouth—namely, that your preceptor is ranked, on election, as of the grade of assistant professor. He either is or is not promoted. He being an effective remedy, in many ways, for the evils of the lecture system which I have described, if he is promoted, the small institution is bankrupt; if he is not, you have a body of somewhat unhappy and dissatisfied middle-aged gentlemen. I once heard the then President Wilson of Princeton—now President of the United States—deliver a delightful lecture at the installation of President Richmond of Union, on the "Art of Being a College President." And he said, "To be a successful college president one must be a fighter. He must have a policy and must carry it right through, for," said he, "college professors are more sensitive, if possible, than members of church choirs." "Some of them," he went on to say—as I recall at this distance of time—"are to be convinced, some to be cajoled, some to be conquered, and some to be ignored." The sensitiveness of the college instructor naturally becomes rather great, to return to my point, if he finds himself at forty or forty-five or fifty an assistant professor, with no chance of promotion except by way of transfer to another college. I am perfectly justified in bringing in that criticism of what would otherwise be rather a capital remedy for the element of waste of which I have been trying to speak.

Finally, I have, though not as badly as I feared, exceeded my ten minutes. Success or failure, under any system, as has been said by speaker after speaker today, depends, of course, mainly on the personal impact of the man.

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DISCUSSION

COLLEGE TEACHERS OF EDUCATION

Abstracts of Discussions of Papers at the Philadelphia Meeting

on psychological characteristics of the intermediate grades (1)[1]

The various viewpoints so far expressed admirably supplement each other. Dr. Judd has demonstrated the existence of periods of least development, and located them about the fourth grade in many school systems. The last speaker calls attention to ample evidence that the grades in which these "nodes" occur vary with locality, and insists that such variation makes valid conclusions impossible. Personally, I believe that the most fundamental conclusion can be based upon the very fact of variation. That is, since the "nodes" occur at varying ages, responsibility is administrative rather than subjective and lies with the school system rather than in some unavoidable subjective condition. Both Dr. Judd and Professor Bagley assume this when they propose their conflicting remedies—*less* drill work in the fourth grade and *more* drill work in the fourth grade. My own belief is that the "node" is not wholly avoidable, because, now and again, accumulating knowledge reaches a point where its organization must be made familiar by repetition, and where the more complex activities that become essential must be transformed into certain habits. I agree with Professor Bagley that this means more drill rather than less, or if not more drill, more efficient drill on essential relationships, where usefulness is due to definiteness and increasing complexity.

Since a small part of each school day is adequate for essential drill, and only a small part can be made effective through drill, Dr. Judd is probably right in his insistence that the fourth grade devotes too much time to drill, to the exclusion of the more many-sided phases of school work in which fourth-graders are naturally interested. Drill and many-sidedness are not mutually exclusive, but supplementary.

(AFTER DR. JUDD'S SUMMING UP)

I cannot refrain from a final word of protest against the assumption that drill is repressive and wasteful, and that children's interests should be determining for the course of study. While innate tendencies point

[1] Such numbers refer to pages in the 1913 *Yearbook* of the College Teachers of Education, published by The University of Chicago Press.

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the way to the line of least resistance, the relationships and the habits essential to the most useful activity at each stage of development must at times be developed in the face of natural tendency. Self-activity is not always the readiest means to education. It is its essential end in the realization of which mechanical memorizing, drill, and routine are always essential factors. If we have not reacted too far from the old-time verbatim instruction, we have been getting too far away from the drill essential at each stage of development to the certain mastery of the definite relationships and increasingly complex systems of ideas and habits on which self-progress and independent activity depend.—A. D. YOCUM, *University of Pennsylvania.*

ON A STUDY OF ASSOCIATION IN CHILDREN OF THE ELEMENTARY SCHOOL BY E. E. JONES, INDIANA UNIVERSITY (16)

The study is entitled "Association in the Elementary School" but it would be more logical to call it "An Additional Series of Tests for Elementary-School Pupils." Ten tests are described and these involve motor, perceptual, and judgment processes quite as much as association. Only one of these tests, the third, which deals with the writing of opposites, can be classified strictly under the head of association. The first, fifth, and tenth tests are essentially motor but only the tenth and perhaps the first appear to be so recognized; the second concerns perceptual rapidity; the fourth involves the factor of logical memory; and the sixth, seventh, eighth, and ninth deal respectively with addition, subtraction, multiplication, and division—processes that give but little insight into associational peculiarities. But all these tests do have the merit of allowing objective grading.

It is in the record of the results obtained, where most would naturally be expected, that the study is most disappointing. We are told that "there is a positive correlation throughout between the efficiency of the pupil in the performance of school tasks and the score made in the association tests," but the amount of correlation is not given. Again, without giving us the figures, we are told that "as we advance in the grades the medians of the association records of all the pupils tested in each grade show a steady increase by almost a constant quantity for each grade." The records of a feeble-minded boy found in the fifth grade are given, and with the exception of being told that these records are below the median of the records of the third graders, we are given no basis of comparison. The Binet scale was applied to a number of exceptional cases and the results were found to agree closely with those

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found by the association tests, but no figures showing this agreement are given.

The fact that these simple tests appear to give a measuring scale for native intelligence and psychological age is certainly suggestive. The chief desiderata still to be worked for in perfecting mental tests, it seems to me, are simplicity, objective grading, and appeal to the basal mental powers and functions. These should include the emotional as well as the intellectual reactions. We need also to distinguish between tests upon native ability and psychological age, and tests upon typical school achievements, or pedagogical age. We ought to have measuring scales for the typical geographical, historical, arithmetical, and other conceptions and performances of the third-grade child, the fourth-grade child, and so on. The Courtis tests perform this service in a measure for arithmetic, but in the other subjects we have not even made a beginning in this direction.

The fact that there is apparently no correlation between the quality of the sense organs and mental performance came as a surprise to Professor Jones and his co-workers. It came as a surprise to me also about seven years ago, when making my study on *The Field of Distinct Vision*. I found, for example, that there is practically no correlation between the horizontal extent of acute vision and reading rate, between visual acuity and reading rate, between sensory defect and reading rate, and between the horizontal extent of vision and the A test. Barring, of course, cases of extreme sensory defect, the cause of the difference in reading rate and other perceptive functions must be looked for on the central, and not on the peripheral, end.

In conclusion Professor Jones suggests that we need two innovations in our school systems—the psycho-clinicist and the scientific school administrator. No doubt we need these persons and they are coming, but could we not also make good use in all larger school systems of a specialist who might be called director of research? Every large school system should be adding its quota to educational science through carefully directed research. This would not only give permanent contributions to educational science, but would also immediately enliven the school work. Various methods of instruction, courses of study, types of management and organization, and so on; might be tested abreast in various parts of the city. While suggestions and initiative might well come from many sources, for results to be obtained the experiments would have to be carried out under the direction of one competent and well-trained scientist.—W. C. RUEDIGER, *George Washington University*.

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ON INCIDENTAL INSTRUCTION BY J. L. MERIAM, UNIVERSITY OF MISSOURI (23)

The values of instruction depend upon two things—the nature of what the pupil learns and the amount of time and energy consumed by the learner in the process. What may be learned or acquired by the pupil is either automatic and habitual responses or conscious and rational responses. The habitual responses are of value, but relatively they are of much lower value and much less in amount than the conscious, rational responses. The latter alone provide for the analysis of a situation, for taking the initiative, for meeting new situations. Incidental instruction will result in more of that kind of knowledge which makes progress possible.

Then the whole problem of method may be considered from the standpoint of repetition. Repetition is necessary in school where the appeal to the instinctive forces is more difficult to make, but the amount of time and energy consumed in the learning may be so great, owing to repetition, that the learning itself is a net loss to the pupil. The problem of instruction is to secure the learning with the minimum of repetition, the minimum of drill. Repetition and drill reduce motive, without which there can be no economic learning. By the choice of rich material for study and the incidental learning of the form, not only will the acquisitions be more valuable but the process will be more economical. —J. N. DEAHL, *West Virginia University*.

ON A NEW METHOD IN THE HISTORY OF EDUCATION BY H. H. HORNE, NEW YORK UNIVERSITY (31)

Any attempt at solving the problem of the better functioning of the history of education demands consideration. How far Professor Horne's scheme is new and how far it meets the difficulties are the questions before us. For the immature student a textbook developing the several topics would seem a necessity. Whether such a book could avoid undue disconnectedness without too much repetition remains to be seen. On the other hand, to use the proposed plan with students already at home in the subject is the common procedure. Thus, however we may take it, a substantial contribution seems improbable.

In addition to more obvious ways, the history of education should function by aiding the student to analyze, for more adequate criticism, the complex body of contemporaneous education. To question what is customary—a matter of the utmost importance—demands as *sine qua non* a novel point of view. The history of education affords such novel viewpoints, particularly in the relatively simple historic systems

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made by emphasizing now one, now another, of the several elements found in our present complex system.—WILLIAM H. KILPATRICK, *Columbia University.*

Ten years ago I came to the conclusion that the course I was giving in the history of education was of little professional value. Treated as a review of educational opinion and practice it was superficial and consequently irksome and negative in results. Treated as the problem of determining the deepest causes of educational ideals and institutions, it became a history of civilization and thus became chiefly cultural and at the same time cumbrous beyond all control. Accordingly I attempted to organize it from an entirely new standpoint, viz., that which views the teacher as facing two radically diverse problems: the one intellectual —the mastery of the psychology of the child and of the principles of method; the other dynamic—the problem of adjustment to the social forces which have created the school and determined its structure, and which sustain all its processes and give them their energy of persistence and direction. Once my students were made to understand that from the moment of their entry into the schoolroom they would be confronted, indeed encompassed, by forces so persistent and dominant that their attempts at betterment might be obstructed or completely thwarted; that these forces were not merely local, temporary, and incidental, but structural, universal, and gaining their astonishing momentum from sources far back in history; that, indeed, there was absolutely no way of comprehending or measuring them or adjusting oneself intelligently to them except by a resort to history—once these things were comprehended, I say, there was no lack of interest. It only remained to reverse the order of presentation—to put first the legislation, the curriculum, the methods, the ideals, which were the product of historic forces, and literally drive the students to history as the only solution of their problems. This method made history really function in professional equipment.—GEORGE M. FORBES, *Rochester University.*

Professor Horne's paper, in my opinion, points the way for making the history of education practical for undergraduates. As it has been taught, it is well adapted to the needs of graduate students doing advanced work, but not to the needs of undergraduates. The pedagogy which can be taught in the limited time accorded to it in undergraduate courses should be confined to the most practical aspects of the subject. What the undergraduate needs is such training as will enable him to teach skilfully and manage effectively a school or a class. The

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main emphasis in undergraduate study should therefore be placed on methods of teaching subjects which he is likely to teach. He ought to be taught the elements of educational psychology in order that he may know the immediate reasons for method; he ought to be taught school and class management. These are the phases of pedagogy which will enable him to teach school, and, yet, these are the very aspects which the academic members of the college faculty are least inclined to accept for credit toward a degree; they are said not to have a "culture value." To conciliate their colleagues in the academic departments, professors of pedagogy in many colleges have slighted these subjects and have unduly emphasized the history of education, the philosophy of education, principles of education, and educational psychology. The result is that, as a rule, graduates of colleges who take courses in pedagogy often do not show in their teaching any effects of their professional training. The value of such training at present is largely taken on faith by superintendents of schools and high-school principals. Unless the colleges give more practical training, the different states will organize state normal schools of college grade for the training of secondary-school teachers, and professorships of pedagogy in the colleges will not be permanent. We are at the parting of the ways in this matter. A number of states, including New York, Michigan, Iowa, Colorado, Missouri, and South Carolina, have already established normal schools of this character. The question of establishing such a school in Illinois has been agitated for several years. The permanency of professorships of pedagogy in colleges will not depend upon what academic colleagues think of the value of their work, but what superintendents of schools and principals of secondary schools who employ their graduates think of it.

We do not distinguish sharply enough between courses in pedagogy for graduate students and courses for undergraduates. The undergraduate has not the preparation required for the scholarly study of the history of education. As a rule, he knows little of the history of philosophy, often not enough of political history, and nothing of ecclesiastical history, all of which are necessary to interpret some of the periods of the history of education. As a rule, his knowledge of psychology and of the biological sciences is too limited to enable him to pursue with much profit a scholarly course in principles of education. Such work should be reserved for the graduate school. There are only two phases of the history of education which, it seems to me, are adapted to the needs of the undergraduate: one is the history of the theories of educational reformers which will give him the genesis of modern educational

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ideals; the other is a history of method in connection with the instruction in methods of teaching. Professor Horne's plan, it seems to me, suggests the most effective way of treating these two phases of the history of education in undergraduate work.—THOMAS M. BALLIET, *New York University.*

ON AN EXPERIMENT WITH THE COURTIS ARITHMETIC TESTS BY E. E. RALL, UNIVERSITY OF TENNESSEE (36)

Extended use of the Courtis tests has convinced me that they are the most convenient and reliable means we have for determining arithmetical abilities. I believe that they are a valuable aid to the teacher in indicating the individual needs of pupils. At the same time the following points call for experimental investigation: (1) The Courtis tests are all speed tests. The pupils work under pressure. In perhaps no other situation is such a demand made upon them. Are the results of such tests an adequate measure of the normal arithmetical abilities of pupils? Has the constant strain for speed any disturbing effect upon the results? (2) Such a speed test may be very confusing for the pupil the first time. To what extent does adaptation to the conditions of the test change the rating of pupils? This has been pretty definitely determined by Otis and Davidson for eighth-grade pupils in the addition test, but each test should be worked through from this point of view. (3) If precisely the same reasoning tests are used at intervals of four weeks, will not memory soon prove a disturbing factor in the results? In the present experiment the reasoning problems were changed for all but ten pupils. It would be interesting to know whether there was any appreciable difference between the scores of these and of the other pupils.—J. CARLETON BELL, *University of Texas.*

ON THE PLACING AND PROMOTION OF TEACHERS

It was the speaker's conviction that certain unhappy conditions attaching to the teaching profession are in large part to be charged to defective methods in placing and promoting teachers. Most prominent among these are: insecurity of tenure; itineracy; lack of vital relationship between teachers and community; unprofessional conduct on the part of teachers; the failure of teachers to grow in grace and power; time-serving; insufficient salary. To minimize such evils is serious and pertinent work for educators.

Three main lines of activity in the way of improvement were indicated as fairly obvious, all three to be undertaken through interinstitutional and interstate co-operation: (1) careful determination and state-

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ment of facts, causes and effects of the evils enumerated, the relation to these evils of teachers' agencies, the various forces now effectively at work to improve such conditions; (2) the devising and perfecting of a nation-wide scheme, or schemes, of placing and promoting teachers—a scheme which will to some extent ameliorate bad conditions through saving the teacher's soul and money; (3) a nation-wide discussion of the ethics involved in seeking, accepting, or leaving a position, and in seeking, employing, promoting, or discharging a teacher. It would seem that reasonable educators, teachers' agencies, and citizens in general, after full discussion, would agree to at least the propositions and implication of such a code, for example, as the folllowing:

1. Poor teachers should not receive positions as long as there are better teachers without them.

2. The more expert teachers should be in the more difficult positions.

3. The more difficult positions should be relatively the better paid ones.

4. The individual genius of the teacher should fit the peculiar requirements of the position.

5. Teacher and position should fit each other in such a way as to conserve the ethical, moral, and professional spirit of the teacher, and especially of the new teacher.

6. There should be promotion, but for meritorious service only.

7. Change of position should be subject to the satisfaction, always, of at least three requirements: (*a*) the good of the school the teacher is leaving; (*b*) the good of the school to which the teacher goes; (*c*) the professional good of the teacher making the change.

8. Personal and political "pull" or influence must be eliminated from all appointments; merit and adaptation are the only legitimate considerations.

9. Teachers of equivalent preparation should be kept in active competition with each other.

10. The method of bringing teacher and position together should be such as to exert an influence upward on salaries and for security of tenure; at the worst it should never tend to work against these ends.

11. "To whom it may concern" or similar testimonials should never be written; and no teacher should ever be the custodian of these or any other testimonials descriptive of himself.

12. Superintendents and others in authority over teachers should not get rid of undesirables by writing glowing testimonials in their behalf.—FRANK E. THOMPSON, *University of Colorado.*

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EDUCATIONAL NEWS AND EDITORIAL COMMENT

HIGH-SCHOOL FAILURES

On March 6 the *Journal* of Flint, Michigan, discussed at length the statistics of failures in the high school of that city. The principal of the high school had prepared a statement in response to the request of the superintendent. The table included in this statement is reproduced in full as given in the *Journal*.

	Total Enrolled		Dropped Out Early		Failed		Passed		Percentage Failed
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	
By grades—									
Ninth	285	428	38	50	68	42	179	336	17.6
Tenth	256	352	38	40	63	54	155	258	22.1
Eleventh	140	227	20	12	26	18	94	197	13.1
Twelfth	122	142	8	7	12	14	102	121	10.4
Total	803	1,149	104	109	169	128	530	912	17.1
By departments—									
English	161	254	15	28	30	21	116	205	13.7
Latin-Greek	67	136	24	18	20	10	23	108	18.6
French-German	50	141	11	7	6	5	33	129	6.3
History	126	137	18	12	25	18	83	107	18.4
Mathematics	186	234	23	27	50	41	113	166	33.7
Science	135	110	8	8	22	7	105	95	12.2
Commercial	78	137	5	9	16	26	57	102	20.9
Total	803	1,149	104	109	169	128	530	912	17.1
By teachers—									
A	29	51	3	5	2	2	24	44	5.5
B	47	77	4	8	8	4	35	65	10.7
C	45	49	8	3	8	6	29	40	16.8
D	51	83	1	0	7	15	43	68	16.5
E	23	62	11	9	4	1	8	52	7.7
F	37	64	8	9	7	13	22	42	23.8
G	31	53	8	6	10	5	13	42	21.4
H	64	68	2	6	10	4	52	58	11.3
I	42	69	7	11	15	8	20	50	24.7
J	45	69	7	12	15	6	23	51	20.0
K	20	62	8	3	2	5	10	54	9.8
L	30	79	3	4	4	0	23	75	3.9
M	62	69	3	4	16	14	43	51	22.5
N	53	84	9	10	16	19	28	55	29.6
O	63	55	11	7	20	11	32	37	31.0
P	48	33	2	1	6	5	40	27	14.1
Q	71	42	6	2	12	3	53	37	14.3
Total	803	1,149	104	119	169	128	530	912	17.1

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The matter was a subject of discussion at the meeting of the Board of Education and several different views were taken both as to the desirability of publishing the report and with regard to the significance of this report as compared with the experiences of other cities. The difficulty of making such a comparison as was desired results from the fact that there is no accessible information from other school systems in this matter.

The *Journal* reports that it called up several school superintendents by long-distance telephone and tried to get some comments on the figures here given. These long-distance telephone reports from Lansing stated in general that the number of Seniors in the high school receiving unsatisfactory marks amounted to 4.5 per cent. Six per cent were unsatisfactory in the Junior class, 10 per cent in the Sophomore class, and 9.7 per cent in the Freshman class. These figures do not give an account of the withdrawals from the school.

From Lapeer, which has a small high school enrolling 175 pupils, the enrolment at the end of the semester is reported as 169, the number who failed in one or more subjects 13, or 6.5 per cent of the students; the number who failed in two or more subjects was 4.2 per cent, giving an average percentage of failure of those enrolled of 1.7 per cent.

Further information of this sort is very much needed for comparative purposes. Attention also turns at once to the large number of failures in mathematics.

MORAL EDUCATION

In connection with the meetings of the Religious Education Association held in Cleveland during the second week of March a conference was called on social education in the high school. This conference met in four sessions and dealt with the various phases of moral instruction and social activity in the high schools. At the first session Professor Sharp of the University of Wisconsin discussed in detail the plan which he has several times presented to high-school teachers for a course of direct moral instruction in the high school. Professor Bigelow gave a paper on sex instruction in which he advocated a very comprehensive treatment of the whole problem. This problem should be dealt with not as a special topic, but there should be a broad, intelligent treatment of all the social relations that attach to this problem. Two principals of high schools gave at later sessions of this conference full account of the social activities going on in their respective schools. These were Principal Johnson of the University High School of the University of Chicago and Principal Davis of the high school at Grand Rapids, Michigan. The

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interest aroused by the report of these practical experiments in actual social work with students in high schools was evidenced by the numerous questions that were raised with regard to the possibilities of extension of these lines of work. At the last session the problem of reconstructing the high school in some measure so as to meet the needs of adolescent pupils more adequately on the moral side was discussed by Principal Rynearson of the Pittsburgh High School and Professor Bagley of the University of Illinois.

This series of conferences was preceded by a symposium on the general topic of "Social and Moral Education in the High School," which appeared in the *Journal of Religious Education*. The papers which were presented at the conference will be reproduced in that journal. High-school teachers will find therefore in the current numbers of that journal much material that will be of direct interest to any student of high-school problems.

COLLEGE-ENTRANCE REQUIREMENTS

A monograph on college-entrance requirements has been issued by the Bureau of Education dealing with all of the different types of entrance requirements represented in American colleges and universities. This pamphlet is prepared by Mr. Clarence D. Kingsley, who is known as the chairman of the National Education Association Committee on the Articulation of High Schools and Colleges. The pamphlet is useful in that it presents in a comprehensive way the great variety of practices in this matter in different institutions. The pamphlet, however, goes farther than merely to present the facts. It advocates a very much more elastic arrangement of entrance requirements than has been heretofore considered possible. The special points on which this pamphlet lays emphasis are the desirability of materially reducing the foreign-language requirement which is very common and the recognition of the vocational and other non-academic courses which the well-organized high school accepts for graduation.

The pamphlet makes it clear that radical and rapid changes are taking place in this matter of college admissions.

LEGISLATION FOR THE HIGH SCHOOLS OF INDIANA

The state of Indiana has adopted a law which provides for uniform textbooks in the high schools of the state. For twenty-four years there have been uniform textbooks in the elementary schools. The recent legislature directs the State Textbook Board to select books in the following subjects: algebra, geometry, commercial arithmetic, history

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(United States, ancient, mediaeval, and modern), civil government, commercial geography, physical geography, history of English literature, history of American literature, English composition, Latin. The board shall also select four elective textbooks in each of the following subjects: botany, zoölogy, physics, chemistry, agriculture, and agricultural botany. The board may select single or elective textbooks in any additional subjects not included in the above lists when such subjects are taught in any high school or whenever any high school shall determine to teach such subjects.

This law was passed on the ground that it will tend to furnish a uniform basis for the course of study in the public high schools of the state and will materially lessen the price of books.

The legislature also passed a law known as the high-school inspector's law. This law creates an official to be appointed by the state superintendent of public instruction with the approval of the state board. He will be in general charge of the high schools throughout the state and will secure so far as is possible uniformity in the work of the four hundred commissioned high schools and the one hundred and fifty certificated schools which he is expected to visit each year.

SUMMER SESSIONS OF SCHOOLS

A number of news items similar to the following call attention to the general movement which is developing all over the country for summer schools for special students. "It is reported from Great Falls, Mont., that at last night's regular meeting of the board of trustees of the Great Falls school district it was decided to conduct a summer school during the vacation months for conditioned or failed pupils in both the grades and the high school." This movement to economize time of pupils who find themselves in difficulty with the school program has become sufficiently general to be described as a common matter. There will be many summer schools in different parts of the country. It is very desirable that information with regard to these summer schools be carefully kept so that we may shortly have an exhaustive study of the advantages or disadvantages of this type of work. Sooner or later there will be summer schools conducted for pupils who have not failed. If it is worth while to save the time and energy of those who have found themselves in difficulty with the school program, then certainly it is worth while to economize the time and energy of the pupils who have succeeded with their school work. There is more loss through vacations, there is more failure on the part of children to use their time properly during the

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period between school sessions, than can be realized by anyone who has not made a careful study of the general behavior of school children during the summer months. Most of the children in the United States are not on vacation in the ordinary sense of that term. Most of them are obliged to remain near their homes and are very greatly disadvantaged by the withdrawal of educational opportunities. That this should appear first of all in the case of those who are deficient is perhaps natural, but there ought to be a clear recognition of the fact that these special cases indicate a general difficulty which ought to be overcome.

AGRICULTURAL EDUCATION IN DENMARK

The Bureau of Education is undertaking a general study of rural conditions and rural schools in all of the civilized countries where progress has been made in educational matters. At the present time a group of representatives of the bureau are studying the folk high schools of Denmark. These folk high schools are special agricultural schools for small landholders. Eleven-day courses are provided for adults. These courses open on the first and third Tuesdays of every month throughout the twelve months of the year. Husbands and wives frequently attend these courses together. Instruction is given in various phases of agriculture and domestic economy. More elaborate courses extending through six months are given in horticulture and other subjects which are needed by the sons and daughters of the small farmers. The movement for the development of rural life in Denmark is very vigorous and these educational institutions constitute one of the agencies employed by the central Danish government in promoting the welfare of the rural population.

CHEMISTRY IN SECONDARY SCHOOLS

At a meeting of the Teachers' Association of Alabama held during the last week in March the subject of introducing elementary chemistry into the high school and even into specialized industrial schools was taken up. The introduction of elementary chemistry was urged by one of the speakers in the following terms:

> The subject is a highly practical and useful science which touches almost every side and phase of our material welfare, whether we consider its relation to the preparation of the foods we eat and the clothing we wear, or whether we investigate its bearing upon the fertilization of our soils, the conversion of some of our crude farm products into materials whose value is thereby enhanced

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many fold, or the transformation of the raw mineral wealth of the earth into finished metals and metallic products which find a thousand different applications in our twentieth-century civilization.

Foreign visitors who come to this country frequently call attention to the fact that we have omitted from our high-school organizations one of the types of schools that the Germans have developed as of great importance in their industrial education, namely, schools of chemical engineering. The reason why practical courses in technical chemistry should not be given seems very obscure when one considers such practical reasons for introducing these courses as are above cited. On the other hand, it cannot be doubted that from the psychological point of view chemistry suffers as compared with physics. In physical phenomena one sees the processes which are under investigation. One can see the movement of a physical apparatus. Even in the biological sciences one can observe steadily for a long time the facts of plant growth or animal life. Chemical processes, on the other hand, are not accessible to direct observation as are physical processes, and it is not possible to subject them to continuous observation as one may many biological facts. There is a certain indirect scientific reasoning involved in the understanding of chemical phenomena. This psychological fact may be the real reason why courses in chemistry are not easily introduced into secondary-school courses.

THE IOWA REORGANIZATION OF HIGHER INSTITUTIONS

The Iowa reorganization is not to be carried out as originally planned by the State Board of Education. During the whole of the present session of the legislature the most vigorous discussions have been carried on touching the rights of the board to make the changes proposed and touching also the wisdom of the changes if they are within the authority of the board. It appears that the board did not adopt the plan with as large a degree of unanimity as was at first supposed. This furnished the way out of the dispute. It is now ordered by act of the legislature that no changes shall be made unless seven members of the board concur. This brings matters back to the organization which existed before the war and each institution for the present, at least, holds its own.

VOCATIONAL COURSES IN NEWTON, MASSACHUSETTS

A pamphlet entitled *A Novel Experiment* comes to hand from the Newton Vocational School printshop at Newtonville, Massachusetts. Quoting briefly from one of the paragraphs in this pamphlet, we have the

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following statement of the problem which is discussed by the teacher who has successfully solved a grave difficulty in our school organization:

> When it was found some years ago that in the Newton schools, as in the schools of many other cities, there was in the eighth grade of the grammar grades a rather large number of girls over fifteen years of age for whom there was little hope of promotion to the high school by the ordinary methods of school grading, a special class for these girls was organized in the Newton Technical High School.

This class of transferred girls was made up of about fifty girls who were somewhat over age. Thirty-five out of the fifty pupils were retarded one grade. The causes of retardation as given on the personal record cards which are sent with the pupils from grade to grade and which contain full information about each pupil were, first, sickness by which a grade was lost, second, late entering of school, third, unfortunate home conditions, fourth, slow mental development. The work which was given to these special girls was aimed to arouse their interest and their activity. An effort was made, as the pamphlet tells us, to cause the girls to realize the advantage to be given them in the special class. They took up vocational studies and the vocational aim aroused them to take up other work. They took up work of a practical sort in housekeeping, sewing, millinery, and expense account. Work in hygiene was made very practical and helpful. Commercial geography was given and illustrated by talks with the reflectorscope. All this work was recognized as higher work than carried on in the elementary school, although it did not follow at all the lines of the ordinary high school.

The final comment made in the pamphlet on this type of high school may be quoted as follows:

> At last, however, a better time is coming when the word "high" in "high school" will stand not alone for certain work in the classics, sciences, and mathematics, but it will also stand for high achievement in many other lines of effort that lead to the strengthening of character, the brightening of intellect, the developing of skill in preparing for one's work in life.

The experiment here described for girls has already been duplicated in the Newton schools by a similar group of classes for retarded boys. The special interest attaching to this experiment arises from the fact that usually less attention is paid to girls who find themselves unable to go on in the high school than to boys similarly situated.

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BOOK REVIEWS

High School Education. Professional treatments of the administrative, supervisory, and specifically pedagogical functions of secondary education, with special reference to American conditions. Edited by CHARLES H. JOHNSTON. New York: Scribner, 1912. Pp. xxii +555.

According to the editor in his introduction: "The American high school is our most interesting educational institution, more democratic than the college and more selective than the elementary school." So great is the "fulness of life" of its students that it has borne good fruit in spite of "administrative and pedagogical" wastefulness. Although dominated by ideals that are more or less mediaeval, it "enjoys a fair measure of success." The point of view thus suggested is promising and the chapters which follow form on the whole a valuable contribution to the interpretation of the American high school in its administrative and pedagogical aspects with reference to present-day needs and ideals.

The editor writes the first two chapters. The first deals with the present-day diversity of demands made on the high school, the lack of well-defined principles of organization and of co-operation with society at large, and the pressing need of defining values and policies and of scientific reconstructions. The second chapter offers a well-balanced discussion of the disciplinary basis of the course of study. The older extreme views of formal discipline are rejected, and a modified form of the doctrine of specific disciplines is adopted, based on the recognized complexity of the processes involved in learning.

The chapters which follow, contributed by various American educators, chiefly college and university men, present first a brief sketch of the history of the secondary curriculum, principles and plans for reorganizing secondary education, the problem of the organization and control of instruction, and twenty-one chapters dealing with the specific subjects of the high-school curriculum.

The plea offered by Professor Davis in chap. iv for the six-year high-school course is very well worked out. The need for such a course is clearly stated and the different experiments to date are outlined, administrative difficulties are discussed, and an initial working-scheme is presented.

The various subjects of the course of study are discussed with reference to the "life-purposes of high-school students—not college admission requirements." A plan consisting of thirteen suggestive topics has been roughly followed in the various essays. While the chapters are quite general and

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differ considerably in value, the reviewer believes that every secondary-school teacher could profit by studying with care not only the chapter dealing with his own specialty but all of them as helping him to appreciate the values of other subjects than his own. The bibliographies dealing with the pedagogical aspects of the respective subjects should be of decided value to every teacher.

The sections devoted to moral training and to instruction in matters of sex are well worked out and should be of value to all persons engaged in high-school work.

Notwithstanding the avowed aim, the discussions leave one with the impression that they are written by those not in intimate touch with real high-school problems. It would have been better if more men in the secondary field could have contributed to the book. The idea of formal discipline crops out occasionally, although the editor's more advanced ideas seem to be fairly well appreciated by the college and university specialists.

IRVING KING

STATE UNIVERSITY OF IOWA

Success: A Manual of Moral Instruction. By FRANK CHAPMAN SHARP. Madison: University of Wisconsin, 1913.

Probably no question of educational values or methods has received so much attention in recent times as that relating to moral instruction and training. It seems that all people feel the need of moral training of some kind; but there is great diversity of opinion respecting the right way to proceed in this matter. There are many, apparently, who believe that pupils should have systematic moral instruction, while others maintain that the thing to do is to put all our energy into the fixing of moral habits. Those who think that pupils should be instructed in regard to behavior usually assign lessons in textbooks, or give lectures upon right and wrong conduct, the aim being to lead pupils to an understanding of the principles involved. It is maintained by those who lay emphasis upon systematic instruction that if pupils can be got to memorize moral principles, they will be likely to practice them in every-day life. But those who doubt the value of formal lessons in moral conduct hold that a pupil may learn the principles of right and wrong in his textbook, but never make application of the principles to the real situations of daily life. On account of this difference of opinion between people interested in improving the conduct of the young, we have not made great progress in respect to moral training in the schools. It is rarely that one picks up an educational magazine or attends an educational convention without being told that in America we are behind in moral training, and we are being continually urged to devote more effort to improving the morals of the young.

Probably no one in this country has contributed more to the solution of this problem of moral training than has Professor Sharp, of the University of Wisconsin. For a number of years, he has been trying a certain method of

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leading pupils to reflect upon the moral problems of their daily lives, and to solve these problems in view of certain principles of right and wrong behavior. He has had extraordinary success in arousing interest on the part of high-school and university students in problems of conduct; and with his method he has also developed in his pupils an unusual keenness in thinking straight through a moral situation, and reaching a sane conclusion regarding right conduct in reference to it.

In the present volume, Professor Sharp presents his method for the use of high-school pupils and teachers. In the first division of the book there are given many questions for the pupils to work out in advance of discussion in the class. In Professor Sharp's own work pupils are required to write out their answers, and offer them in class. These answers serve as a basis for class discussions. The questions pertain to the practical matters of everyday life—questions in which any high-school pupil who has reached his Junior year can hardly fail to be interested. The questions in Part I relate to the management of the mind, and the following illustrate the method of procedure:

1. Why does tying a knot in a handkerchief help one to remember an errand?
2. Can you repeat the alphabet backward as quickly and correctly as forward?
3. If you had a declamation to recite before an audience, what would you do to make certain that you would be able to repeat it when the time came?
4. Are habits easier to acquire at one time of life than another? What time of life is most favorable for acquiring them? What are we to think of the adage: "It is never too late to be what you might have been"?
5. How would you go about it to get control of a bad temper? For example, suppose you had made resolution after resolution, and when the time came to put it into effect you always failed. Make the situation real by thinking of actions on the part of other people likely to arouse your anger. Note that the problem is not merely that of finding out what you ought to do at the moment when provocation arises, but also what you should do to uproot the undesirable trait of character in the intervals of freedom from temptation.

And there are a great many other questions like these referring to the management of the mind.

Then in Part II are presented numerous questions relating to the Nature of Success. They are grouped under the following headings: Popular Misconceptions of Happiness; the Glow of Health; Work; Reading; Friendship; Service and Character. The purpose of all these questions is to cause pupils to become observant and reflective regarding moral situations presented in everyday life. It is not the primary aim to give the pupil information, though he does gain a great deal of knowledge relating to conduct; but the chief object is to develop in him the power of reflecting sanely upon the problems of life as they arise in his adjustment to people, and the habit of dealing with them effectively.

In the second division of the work, answers are given to the problems considered in the first division. These answers are intended in the first place

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as an aid for the teacher. They present a point of view which will be of service to him in the discussion of the problems in the class. Then it is intended that these answers shall serve as a résumé of the discussions after they have been worked over by the pupils. In this way the pupil is led first to attempt to solve a problem by his own observation and reflection, and by the application of principles of right and wrong; and after he has made his best effort, and has had give-and-take discussion with his fellows in the class, he then gets the view which the experience of the race has formulated in respect to any problem which has been proposed.

From the beginning the pupil is helped to regard all these problems as having a bearing upon success; and he is led to consider, in the first place, the intellectual, physical, and moral conditions of success. No attempt is made to be complete or final in the treatment of these topics, but only to guide the pupil to reflect upon the matters of primary importance. Success is not defined for the pupil; he may proceed on his own conception of what it implies. But as the discussion of the matter proceeds, the pupil cannot fail to see that a certain type of man or woman—one with vigorous health, who meets the problems of everyday life in an intelligent manner; who loves his work and does it with spirit and enthusiasm; who has a deep interest in the higher and more educative forms of play and relaxation; who is a genuine good friend and has good friends; who is a loyal member of a loyal family; who is generous in his relations to people; who has interest in matters of public importance; and who believes in the value of a wholesome character—this, it is made to appear, is the type of person who will get the most out of life, who will achieve success in the highest way and who will do the most for the world.

To the present reviewer it seems that Professor Sharp's book should be of unusual service to high-school teachers. It should enable them to treat the subject of moral instruction and training in a very vital, natural, and effective way. Even if there should be no class in moral instruction in a particular high school, the teachers should nevertheless be able to get from this book many suggestions which they could utilize to advantage in morning exercises, and on occasions when they have an opportunity to discuss questions of conduct with pupils in a natural and unaffected way.

M. V. O'SHEA

UNIVERSITY OF WISCONSIN

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BOOKS RECEIVED

EDUCATION AND PSYCHOLOGY

Bancroft, Jessie H. The Posture of School Children, with Its Home Hygiene and New Efficiency Methods for School Training. New York: Macmillan, 1913. Pp. xiii+327. Illustrated. $1.50 net.

Briggs, Le Baron Russell. College Life: Essays Reprinted from "School, College, and Character" and "Routine and Ideals." Boston: Houghton Mifflin Co., 1913. Pp. iv+124. $0.35.

Bryant, Louise Stevens. School Feeding; Its History and Practice at Home and Abroad. With an Introduction by P. P. Claxton. Philadelphia: J. B. Lippincott Co., 1913. Pp. 345. Illustrated. $1.50 net.

Colvin, Stephen Sheldon, and Bagley, William Chandler. Human Behavior: A First Book in Psychology for Teachers. New York: Macmillan, 1913. Pp. xvii+336. Illustrated. $1.00 net.

Gulick, Luther Halsey, and Ayres, Leonard P. Medical Inspection of Schools. (Revised Edition.) New York: Survey Associates, Inc., 1913. Pp. xx+224. Illustrated. $1.50.

National Education Association of the United States. Journal of Proceedings and Addresses of the Fiftieth Annual Meeting Held at Chicago, July 6–12, 1912. Pp. xii+1427. Yearbook and List of Active Members, Revised to December 31, 1912. Pp. iii+429. Ann Arbor, Michigan: Secretary's Office, 1912.

Report of the Conference on the Education of the Domiciled Community in India, Simla, July, 1912. Calcutta: Superintendent Government Printing, India, 1912. Pp. iv+202. 1s. 6d.

Stevens, Ellen Yale. A Guide to the Montessori Method. New York: Frederick A. Stokes Co., 1913. Pp. xiii+240. Illustrated. $1.00 net.

Strayer, George Drayton, and Thorndike, Edward L. Educational Administration: Quantitative Studies. New York: Macmillan, 1913. Pp. xii+391. $2.00 net.

United States Bureau of Education Bulletins. 1912, No. 30 (Whole Number 504). Latin-American Universities and Special Schools. By Edgar Ewing Brandon. Pp. 153. Illustrated. 1913, No. 4 (Whole Number 511). Present Standards of Higher Education in the United States. By George Edwin MacLean. Pp. 191. No. 8 (Whole Number 515). The Status of Rural Education in the United States. By A. C. Monahan. Pp. 72. Illustrated. No. 9 (Whole Number 516). Consular Reports on Continuation Schools in Prussia. Pp. 30. Washington: Government Printing Office.

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ENGLISH

Canby, Henry Seidel. A Study of the Short Story. New York: Henry Holt & Co., 1913. Pp. v+273.

Flemming, Louis A. Synonyms, Antonyms, and Associated Words: A Manual of Reference Designed to Be of Practical Assistance in the Expression of Ideas through the Use of an Exact and Varied Vocabulary. New York: Putnam, 1913. Pp. ix+619. $1.25 net.

Kent, Charles W. (Ed.). Southern Poems. With Biographical Notes. Boston: Houghton Mifflin Co., 1913. Pp. viii+112. $0.25.

Shurter, Edwin DuBois, and Taylor, Carl Cleveland. Both Sides of One Hundred Public Questions Briefly Debated, with Affirmative and Negative References. New York: Hinds, Noble & Eldredge, 1913. Pp. xvii+260.

HISTORY

Bishop, Farnham. Panama, Past and Present. New York: The Century Co., 1913. Pp. xvi+271. Illustrated. $0.75 net.

Innes, Arthur D. (Ed.). A Source Book of English History for the Use of Schools. Volume I. 597–1603 A.D. Cambridge, England: The University Press, 1912. Pp. viii+383. Illustrated. 4*s.* 6*d.*

SCIENCE AND MATHEMATICS

Clute, Willard Nelson. Agronomy: A Course in Practical Gardening for High Schools. Boston: Ginn & Co., 1913. Pp. xvi+296. Illustrated. $1.00.

Emerson, Frederick V. Geography of Missouri. (The University of Missouri Bulletin, Educational Series, Vol. I, No. 4.) Columbia: University of Missouri, 1912. Pp. 74. Illustrated.

Goodwill, G., and Carey, F. S. Elementary Mechanics. Oxford: The Clarendon Press, 1913. Pp. 230. Illustrated. $1.10.

Minchin, George M. A Treatise on Hydrostatics. Vol. I. Containing the More Elementary Part of the Subject. Pp. v+198. Illustrated. $1.10. Vol. II. Containing the More Advanced Part of the Subject. Pp. iv+180. Illustrated. $1.50. (Second Edition, Revised.) Oxford: The Clarendon Press, 1912.

National Education Association. Final Report of the National Committee of Fifteen on Geometry Syllabus. July, 1912. Pp. 54.

Salisbury, Rollin D., Barrows, Harlan H., and Tower, Walter W. Modern Geography for High Schools. New York: Henry Holt & Co., 1913. Pp. ix+424. Illustrated.

Shorter, H. V. S. A Course of Elementary Practical Physics. Part I. Mensuration, Mechanics, Hydrostatics. Pp. 111. $0.50. Part II. Heat and Light. Pp. 216. $0.75. Oxford: The Clarendon Press, 1912.

Thurston, Ernest L. Business Arithmetic for Secondary Schools. New York: Macmillan, 1913. Pp. xv+431. Illustrated. $1.00 net.

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CURRENT EDUCATIONAL LITERATURE IN THE PERIODICALS[1]

IRENE WARREN[2]
Librarian, School of Education, University of Chicago

Anthony, Willis B. Teaching real life in school. World's Work 25:695–98. (Ap. '13.)

Armstrong, A. C. German culture and the universities. Educa. R. 45:325–38. (Ap. '13.)

Babcock, Kendric C. Bibliographical instruction in college. Lib. J. 38:133–36. (Mr. '13.)

Baldwin, Bird T. Educational psychology at the Cleveland meeting of the American Psychological Association. J. of Educa. Psychol. 4:164–70. (Mr. '13.)

Barnes, Earl. Comparison of Froebelian and Montessori methods and principles. Kind. R. 23:487–90. (Ap. '13.)

Bawden, William T. Recent progress in the movement for vocational education. Voca. Educa. 2:318–33. (Mr. '13.)

Boggs, Anita U. M. Cultural schools or continuation schools. Pedagog. Sem. 20:71–77. (Mr. '13).

Protest against narrow vocational training.

Boutroux, Emile. The thought of America and of France. Educa. R. 45:269–88. (Mr. '13.)

Boyer, Jacques. A new method of educating deaf mutes. Sci. Am. 108:221. (8 Mr. '13.)

Butler, Nicholas Murray. Vocational preparation as a social problem. Educa. R. 45:289–97. (Mr. '13.)

Canby, Henry Seidel. The professor. Harper 126:782–87. (Ap. '13.)

Coleman, Norman F. The Bible as literature in the high school. School R. 21:246–49. (Ap. '13.)

Collateral work in connection with the study of American literature. Educa. 33:448–50. (Mr. '13.)

[1] *Abbreviations.*—Educa., Education; Educa. R., Educational Review; El. School T., Elementary School Teacher; J. of Educa. Psychol., Journal of Educational Psychology; Kind. R., Kindergarten Review; Lib. J., Library Journal; Liv. Age., Living Age; Outl., Outlook; Pedagog. Sem., Pedagogical Seminary; Pop. Sci. Mo., Popular Science Monthly; Psychol. Clinic, Psychological Clinic; R. of Rs., Review of Reviews; School R., School Review; Sci. Am., Scientific American; Teach. Coll. Rec., Teachers' College Record; Tech. World M., Technical World Magazine; Voca. Educa., Vocational Education.

[2] Annotations by Dr. F. N. Freeman.

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Cook, W. A. Vocational training for the Indians. Voca. Educa. 2:289–98. (Mr. '13.)

Corbin, Alice M. How to equip a playroom—the Pittsburgh plan. Playground 7:8–15. (Ap. '13.)

Courtis, S. A. The reliability of single measurements with standard tests. El. School T. 13:326–45. (Mr. '13.)

Curtis, Henry S. The boy scouts the salvation of the village boy. Pedagog. Sem. 20:78–85. (Mr. '13.)

Dana, John Cotton. The supreme importance of reading. Pegagog. Sem. 20:17–22. (Mr. '13.)

Thinks we do not know how to read properly.

DeBusk, B. W. Height, weight, capacity, and retardation. Pedagog. Sem. 20:89–92. (Mr. '13.)

Finds a positive relation between height, weight, vital capacity, and advancement in school.

Education: a keynote of the Panama Pacific Exposition. R. of Rs. 47:309.

Educational rank of the states. Lit. D. 46:772. (5 Ap. '13.)

Elliott, Edward C. The report of the New York school inquiry. El. School T. 13:320–25. (Mr. '13.)

Forbes, George M. Organization and administration of industrial schools. Voca. Educa. 2:278–88. (Mr. '13.)

Franklin, Robert. Schoolhouses as employment agencies. Tech. World M. 19:268–70. (Ap. '13.)

Furney, Oakley. Education with an aim to service. Voca. Educa. 2:299–317. (Mr. '13.)

Gayler, G. W. Elimination from a different angle. Psychol. Clinic 7:11–16. (Mr. '13.)

Methods by which elimination was reduced in one town.

Gerrans, H. T. Oxford University finance. Educa. R. 45:376–87. (Ap. '13.)

Gilbertson, Albert N. A Swedish study in children's ideals. Pedagog. Sem. 20:100–106. (Mr. '13.)

Gillette, John M. Sociology as a high school subject. Educa. R. 45:256–62. (Mr. '13.)

Harley, Harrison L. The physical status of the special class for bright children at the University of Pennsylvania, summer session of 1912. Psychol. Clinic 7:20–23. (Mr. '13.)

Heilig, Matthias R. A child's vocabulary. Pedagog. Sem. 20:1–16. (Mr. '13.)

A catalogue of words used by a girl of three years.

Hodge, Clifton F. Preparation of teachers for nature study and civic biology. Pedagog. Sem. 20:58–70. (Mr. '13.)

Jamgotchian, Mesrob K. Sparrow language the secret language among the Armenian children. Pedagog. Sem. 20:98–99. (Mr. '13.)

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Jones, W. Franklin. The vitality of teaching. Psychol. Clinic 7:1–10. (Mr. '13.)

Motivation as the central problem in teaching.

Kaempffert, Waldemar. The industrial need of technically trained men. Sci. Am. 108:252–54. (15 Mr. '13.)

Kimball, Dorthy E. Convent schools in America. Educa. R. 45:263–68. (Mr. '13.)

Koeppel, George. Observations concerning the organization of schools and certain phases of educational work in Germany. IV. El. School T. 13:346–52. (Mr. '13.)

Krause, Carl A. Modern language instruction in the United States. Educa. R. 45:237–48. (Mr. '13.)

Levin, Samuel M. Improvement of elementary evening schools. Educa. 33:399–409. (Mr. '13.)

Lippert, Emanuel. Child study in Bohemia and Moravia. Pedagog. Sem. 20:107–8. (Mr. '13.)

———. Report of the Bohemian National Committee for Protection of Children. Pedagog. Sem. 20:109–11. (Mr. '13.)

Lurton, Freeman E. Reducing retardation. Pedagog. Sem. 20:86–88. (Mr. '13.)

The reduction of the amount of retardation accomplished largely by the reduction of time lost from school.

MacDougall, Robert. The child's speech. IV. Word and speech. J. of Educa. Psychol. 4:29–38. (Ja. '13.)

MacLear, Martha. The fact of personality in the development of an atypical child. Pedagog. Sem. 20:93–97. (Mr. '13.)

Methods of treatment in an individual case.

McKee, Ralph H. Ancient vs. modern languages as a preparation for English. Pedagog. Sem. 20:45–47. (Mr. '13.)

Comparison of grades in college of those having different amount of ancient and modern foreign language in their preparatory work.

McLane, C. L. The junior college, or upward extension of the high school. School R. 21:161–70. (Mr. '13.)

Mackie, Ransom A. Progressive high school reorganization. Educa. 33:420–27. (Mr. '13.)

Magni, John A. The decline of the classics and their place in future curricula. Pedagog. Sem. 20:23–44. (Mr. '13.)

Argues that the classics have suffered on account of a false and temporary utilitarian aim in education.

Miller, George J. A high-school course in field geography. School R. 21:171–79. (Mr. '13.)

New York public school controversy. Outl. 103:575–76. (15 Mr. '13.)

Parkinson, William D. Equal pay or equal service. Educa. R. 45:249–55. (Mr. '13.)

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Pyle, W. H. Economical learning. J. of Educa. Psychol. 4:148–58. (Mr. '13.)

Rapeer, Louis W. The problem of formal grammar in elementary education. J. of Educa. Psychol. 4:125–37. (Mr. '13.)

Rendall, E. D. John Smith at Harrow. Liv. Age 58:602–12. (8 Mr. '13.)

Richter, Leonard. Educational surveys and vocational guidance. Teach. Coll. Rec. 14:3–43. (Ja. '13.)

Robertson, C. R. The training of secondary-school teachers. School R. 21:225–34. (Ap. '13.)

Rowell, Percy E. The status of science teaching in the elementary schools of the United States. El. School T. 13:387–404. (Ap. '13.)

Russell, James E. Professional factors in the training of the high school teacher. Educa. R. 45:217–36. (Mr. '13.)

Sanders, W. H. A study of professional work as presented in the state normal schools of the United States. Pedagog. Sem. 20:48–57. (Mr. '13.)

A study of the lack of uniformity in the work of the state normal schools.

Smith, Preserved. The unity of knowledge and the curriculum. Educa. R. 45:339–44. (Ap. '13.)

Snow, William B. Modern language in American public schools. Educa. R. 45:362–75. (Ap. '13.)

Starch, Daniel, and Elliott, Edward C. Reliability of grading work in mathematics. School R. 21:254–59. (Ap. '13.)

Starkey, Alice G. A plea for more moral training in the colleges. Educa. 33:437–39. (Mr. '13.)

Stevenson, John J. Some random thoughts concerning college conditions. Pop. Sci. Mo. 83:397–411. (Ap. '13.)

Stockbridge, Frank Parker. A university that runs a state. World's Work 25:699–708. (Ap. '13.)

Stone, C. W. Problems in the scientific study of the teaching of arithmetic. J. of Educa. Psychol. 4:1–16. (Ja. '13.)

Terman, Louis M., and Hocking, Adeline. The sleep of school children: its distribution according to age, and its relation to physical and mental efficiency. J. of Educa. Psychol. 4:138–47. (Mr. '13.)

Tesson, Louis J. Oral instruction in modern languages. Educa. 33:428–36. (Mr. '13.)

Thompson, Grace. High-school reading: the Newark plan. School R. 21:187–90. (Mr. '13.)

Washington, Booker T. New type of rural school. Survey 29:837–38. (15 Mr. '13.)

Wheeler, George. The six-year high school. School R. 21:239–45. (Ap. '13.)

White, Frank R. Industrial education in the Philippine Islands. Voca. Educa. 2:265–77. (Mr. '13.)

Wild, Laura H. Training for social efficiency. Educa. 33:440–47. (Mr. '13.)

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THE SCHOOL REVIEW
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THE PARADOX OF OXFORD[1]

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New York City

It is commonly agreed that no other city in Great Britain lays so potent a spell on the visitor as Oxford. The gardens of the sister university along the Cam may catch the charm of an English summer more entrancingly; Edinburgh, with her crown of hills, and her cavernous wynds, may be more picturesque; London, with her pride of empire, her spoils of art, her web of human triumphs and despair, may be more appalling to the imagination; but there is something in the aspect of the crowded, cloistered colleges of Oxford that penetrates more deeply into the mind of the observer and leaves him not quite the same man as before. Such at least was my experience last summer when I visited the town for the first time. "There is an air about it resonant of joy and hope: it speaks with a thousand tongues to the heart; it waves its mighty shadow over the imagination: . . . its streets are paved with the names of learning that can never wear out: its green quadrangles breathe the silence of thought, conscious of the weight of yearnings innumerable after the past, of loftiest aspirations for the future."

It was this feeling of the intellectual hopes and moral ideas of many generations of men here made visible in stone, rather than what has been called the "almost despairing sense of loveliness,"

[1] Address before the Michigan Schoolmasters' Club at Ann Arbor, Michigan, April 4, 1913.

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that stirred me profoundly as I walked from court to court in the expressive silence of the long vacation. It was a feeling good and salutary for the heart. Yet in the end the impression left upon me was curiously mixed. I was elated and teased at the same time; my spirits were, so to speak, both enlarged and contracted. In part this was due, no doubt, to the manifest incongruities of the town itself as it has developed in these latter years. From the mediaeval seclusion of a quadrangle one steps into a street now bustling with modern shops and a very unmediaeval throng of shoppers. Only a little while ago, in Matthew Arnold's day, "the pleasant country still ran up to the walls and gates of the colleges; no fringe of mean or commonplace suburbs interposed between the coronal of spires and towers and its green setting." But now, if the visitor, with his mind filled with the lonely religious wrestlings of Newman, would walk out to Iffley and Littlemore, he must pass through long rows of vulgar and tawdry villas. There is something disconcerting in these inharmonious contrasts. And, guided perhaps by this discord of the past and the present, one begins to be aware of something paradoxical in the beauty and significance of the university itself. The very architecture of the place, with all its charm, is a kind of anomaly. "True to her character of the home of lost causes and impossible loyalties, Oxford clung with a tragic desperation to her ancient garments of Gothic pattern, hugging them about her until, worn to rags and tatters, they dropped off, and she was constrained to clothe her nakedness with the sole contemporary dress available in the eighteenth century, to wit, that sheer Palladianism into which the illusory 'New Birth' movement itself had by that time degenerated. Thus it befell that Oxford architecture never passed through the normal gamut of successive phases of declension from the sixteenth century onward, but that between the perfection of English mediaeval masoncraft . . . and the corrupt fashion of Trinity, Queen's, and Worcester Colleges, . . . there was no intermediate stage but that of the so-called 'Oxford Gothic.'"[1]

And this "picturesque hybrid" in building, which is neither Renaissance nor mediaeval, neither quite Greek nor quite Christian,

[1] Aymer Vallance, *The Old Colleges of Oxford*.

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is symbolical of what Oxford has stood for intellectually and morally. With good right one of her own living poets has described her as

> . . . . the mother of celestial moods,
> Who o'er the saints' inviolate array
> Hath starred her robe of fair beatitudes
> With jewels worn by Hellas.

There is, if you stop to think about it, this huge inconsistency underlying the institution of Oxford. It was founded as a monastic school to train boys for the priesthood, and its colleges still bear something of the outward appearance of cloistered retreats. Until well into the last century every matriculant was obliged to subscribe to the Thirty-nine Articles, and still today the policy of the university is largely controlled by a Convocation of black-robed priests who come up from their country parishes with the zeal of the church burning in their breasts. Yet education at Oxford, though it was at the first directed to monkish ends and though until very recently it retained a good deal of that scholastic coloring, was from an early date, if not from the beginning, crossed with Pagan ideals. Aristotle was held to be an authority in morals by the side of St. Augustine, prayers were offered to Jehovah when Olympian Zeus was in the heart of the worshiper, and boys were taught, are still taught, to mold their emotions at once to the modes of the Psalms and of Horace.

This is what I have meant by the classical paradox of Oxford, giving it that name not because this inconsistency is peculiar to the university, but because there more than anywhere else it is driven into the imagination by the teasing charm of a petrified and glorified tradition. It is indeed, if we look below the surface of things, deeply imbedded in the foundations of our whole modern life and points far back to that Hellenistic civilization in which the ideals of Greece and the Orient were mingled to produce the new world. To explain what I mean by this questionable but very fruitful union, I cannot do better than quote a few sentences from the little treatise of Lucian called *The Wisdom of Nigrinus*. We have in this dialogue the story of a visit to a philosopher of the second century of our era who styled himself a Platonist, a denizen of Rome but probably

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enough, like his friend Lucian, a child of Asia. One of the persons of the dialogue, having been in Rome, reports thus the philosopher's own account of his mode of life:

> Choosing thereby a sort of life which seems to most people womanish and spiritless, I converse with Plato, Philosophy, and Truth, and seating myself, as it were, high up in a theater full of untold thousands, I look down on what takes place, which is of a quality sometimes to afford amusement and laughter, sometimes to prove a man's true steadfastness. . . . . One has cause to admire philosophy when he beholds so much folly, and to despise the gifts of fortune when he sees on the stage of life a play of many rôles, in which one man enters first as servant, then as master; another first as rich, then as poor. . . . . I have said that there is food for laughter and amusement in what goes on; let me now explain it. To begin with, are not the rich ridiculous? They display their purple gowns and show their rings and betray an unbounded lack of taste. . . . . Far more ridiculous, however, than the rich are those who visit them and pay them court. They get up at midnight, run all about the city, let servants bolt the doors in their faces, and suffer themselves to be called dogs, toadies, and similar names. By way of reward for this galling round of visits they get the much-talked-of dinner, a vulgar thing, the source of many evils. [Translated by A. M. Harmon.]

All this, the visitor goes on to say, seemed to Nigrinus quite ludicrous. And further, he reports, Nigrinus

> made special mention of people who cultivate philosophy for hire and put virtue on sale over a counter. . . . . For he maintained that one who intends to teach contempt of wealth should first of all show that he is himself above gain. Certainly he used to put these principles into practice. . . . . So far was he from coveting the property of others that even when his own property was going to rack and ruin he did not concern himself about it. . . . . He made no secret of his condemnation of the sort of philosophers who think it a course in virtue if they train the young to endure "full many pains and toils," the majority recommending cold baths, though some whip them, and still others, the more refined of their sort, scrape the surface of their skin with a knife-blade.

As for the visitor to Nigrinus, he himself tells the strange effect of the philosopher's words upon him.

> In a great fit of confusion and giddiness [he says], I dripped with sweat, I stumbled and stuck in the endeavor to speak, my voice failed, my tongue faltered, and finally I began to cry in embarrassment. . . . . My wound was deep and vital, and his words, shot with great accuracy, clove, if I may say so, my very soul in twain.

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This, it is almost necessary to observe, is not a scene of conversion from Wesley's *Diary*, but is a page from the book of one who, more perhaps than any other writer of his age, was steeped in the traditional learning of Greece. Yet what a change! How far we have got from Pindar's song of "wisdom blooming in the soul," from his praise of the man who, because death awaits at the end, will not "sit vainly in the dark through a dull and nameless age, and without lot in noble deeds," and from his glorification of those upon whom, for their reverence of things divine in the hour of splendid triumph, "the pleasant lyre and the sweet pipe shed their grace"! We have gone a great way from Aristotle's notion of the honorable man, the σπουδαῖος, who in winning the world has won also his own soul. And even if, formally, the ideal of Nigrinus can in a way be connected with Plato's contrast of the visible and invisible worlds, yet the animus, so to speak, of the new wisdom is something very different from that which heartened men in the garden of the Athenian Academy. In place of the philosopher who, seeking the vision of the gods, still kept in his heart the fair and happy things of Hellas, and who, knowing the emptiness of life's rewards, was nevertheless ready to serve and govern the state, we now have one who regards it as the highest goal of life to sit in a kind of idle abstraction from the world and hypnotize himself with the wisdom of his lord. This new race of philosophers indeed, whom Lucian eulogizes on one page and ridicules on another, are but bearded monks who have not learned the name of their real master; they speak the words of Athens, but with barbarous images in their souls. Their denial of practical life will be known all through the Middle Ages as the *contemptus mundi*, and already one sees how their asceticism and praise of poverty divide them harshly into saints and hypocrites not entirely unlike those of the cloister.

There is an emotional difference between the philosophers of the Hellenistic world and the monks of the Christian world, due largely no doubt to the fact that the former still confessed the Socratic doctrine, however they may have distorted it, whereas the latter honestly subjected it to what they regarded as a higher revelation. Yet the paradox still troubles the new religion. The basis of education, in language entirely and to no small extent in ideas, remains

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Greek and Latin, however the superstructure may be Christian and oriental. Nor were the Fathers and rulers of the church unaware of this; their trick of decrying Pagan literature is due in no small part to a feeling of uneasy dependence on it for their knowledge and philosophy. They would use it and at the same time spurn it under their feet as they reached up to the celestial wisdom. So in a comment on a verse in Kings: "But all the Israelites went down to the Philistines, to sharpen every man his share, his coulter, and his axe," Gregory the Great, or some other, applies the words to the contrast between the classical tradition and the new faith.

> We go down to the Philistines [he says] when we incline the mind to secular studies; Christian simplicity is upon a height. Secular books are said to be in the plain since they have no celestial truths. God put secular knowledge in a plain before us that we should use it as a step to ascend to the heights of Scripture. So Moses first learned the wisdom of the Egyptians that he might be able to understand and expound the divine precepts; Isaiah, most eloquent of the prophets, was *nobiliter instructus et urbanus;* and Paul had sat at Gamaliel's feet before he was lifted to the height of the third heaven. One goes to the Philistines to sharpen one's plow, because secular learning is needed as a training for Christian preaching.[1]

But if mediaeval man, in general, was ready to accept the Pagan tradition as a mere treasure of the Philistines to be plundered for the benefit of the chosen people, there were those also who made a brave attempt to effect a reconciliation—always, of course, *ad majorem Dei gloriam.* The most notable of these efforts is the stupendous *Summa* of St. Thomas Aquinas, in which the newly discovered philosophy of Aristotle is welded into Christian doctrine to make a vast body of theology. The words of the Philosopher (no other name is needed to designate Aristotle, as the master of those that know) and sentences of the Fathers are quoted together without distinction as if they were of one and the same authority. But, despite the admirable patience and inexhaustible cunning of the Angelic Doctor, an instructed reader can go through his work and distinguish the two elements of which his system is composed, as we can separate the two metals of an alloy; there is no chemical compound here, but a mechanical mixture. The distinction can be made visible to the eyes by turning to Dante, whose allegory of the

[1] From H. O. Taylor, *The Mediaeval Mind.*

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future is based frankly on the *Summa* of St. Thomas. There is significance in the very guides who carry the pilgrim through hell and purgatory up to the celestial sphere. In the first two realms, Virgil, the bearer of the classical tradition, is sufficient, but when the poet from the earthly Paradise is about to mount to the heavenly Paradise and the vision of God he needs the help of Beatrice, who is the symbol and voice of theology.

When we pass from the Middle Ages to the Renaissance we find two notable movements aiming at an elimination of this inherited inconsistency. One of these may be called the Pagan revival. It was nothing less than an effort to surmount the difficulty by throwing away the moral ideals of both Christianity and classicism and clinging to the purely natural and imaginative aspects of the ancient world in what came to be regarded as Paganism. Not a little of the art and literature of Italy is of that utterly non-moral sort. The other movement undertook to reconcile Greek philosophy and Christianity in a synthesis which should embrace the higher and, in this differing from the work of St. Thomas, the less dogmatic elements of each. This was the half-avowed purpose of the Cambridge Platonists, a noble ambition which somehow, owing perhaps to the absence of any great genius among them, they just failed to achieve. Their failure was the tragedy of the age, and left the task still to be accomplished, if, indeed, it can in any way be accomplished.

It may seem that I am dwelling over much on a commonplace; yet I doubt if we often realize how deeply this discrepancy lies imbedded in our modern civilization. Certainly the knowledge of it came to me last summer at Oxford with the force almost of discovery. And I remember the hour and the place of the awakening. It was one gray day in the quadrangle of Oriel College, as I stood by the entrance to the Common Room looking up at the windows of what had been the rooms of John Henry Newman. In that college the Oxford Movement had its inception and passed away. The little group of scholars who in the Common Room met together and discussed the meaning of religion and the office of the church were men trained and steeped in Aristotle and the other classics; they never lost that discipline, yet their whole

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endeavor was to bring back the mediaeval interpretation of life. An amusing incident of this tendency is connected with Dr. Hampden's Bampton Lectures on scholastic philosophy, delivered in 1832, and afterward published. No one in Oxford read the book, not even Newman who wrote against it, and no one there had read any scholastic philosophy, says Mr. Mozley, who ought to know; he even declares that the book is unreadable, and I, for one, have taken his word for it. Yet the rumor got about that Dr. Hampden was trying to undermine the authority of mediaeval tradition, and the horror and hubbub were enormous. The situation became at least anomalous when Hampden, though Regius Professor of Divinity, was deprived of his place on the board that chose the Select Preachers for the University.

These things came to my mind as I stood in the quiet quadrangle of Oriel, and then I remembered the life of the man who must so often in moments of perplexity have looked out of the windows over my head, gathering from this very scene comfort and strength for his battle with the world. Newman, if anyone, was the very embodiment of the Oxford spirit, and if we think of his great struggle as a hesitation between the Anglican and Roman churches, it was, in a deeper sense, the agony of an intuitive soul caught in the dilemma of the two traditions of which the very stones of his college with their hybrid architecture, neither Renaissance nor Gothic, are a symbol. How thoroughly his mind was endued with the humanistic spirit, how much the great poets of antiquity meant to him, may be known from one of his famous paragraphs, one of the supreme things of our speech:

> Let us consider, too, how differently young and old are affected by the words of some classic author, such as Homer or Horace. Passages, which to a boy are but rhetorical commonplaces, neither better nor worse than a hundred others, which any clever writer might supply, which he gets by heart and thinks very fine, and imitates, as he thinks, successfully, in his own flowing versification, at length come home to him, when long years have passed, and he has had experience of life, and pierce him, as if he had never before known them, with their sad earnestness and vivid exactness. Then he comes to understand how it is that lines, the birth of some chance morning or evening at an Ionian festival, or among the Sabine hills, have lasted generation after generation, for thousands of years, with a power over the mind, and a charm which the current literature

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of his own day, with all its obvious advantages, is utterly unable to rival. Perhaps this is the reason of the mediaeval opinion about Virgil, as of a prophet or a magician; his single words and phrases, his pathetic half-lines, giving utterance, as the voice of Nature herself, to that pain and weariness, yet hope of better things, which is the experience of her children in every time.

That is the purest humanism. It is the classic tradition carried in a mind fitted by nature and by long training to live in the clear air of the antique world. It is, or was until yesterday, the finest flower of our education. It characterizes the more open nurture of the Anglican church. Yet all this Newman was to surrender, borne away by the narrower and intenser current of mediaevalism, to his own and our incalculable loss. You may hear his recantation in the chapter on "Christianity and Letters" in *The Idea of a University:*

And while we thus recur to Greece and Athens with pleasure and affection, and recognize in that famous land the source and the school of intellectual culture, it would be strange indeed if we forgot to look further south also, and there to bow before a more glorious luminary, and a more sacred oracle of truth, and the source of another sort of knowledge, high and supernatural, which is seated in Palestine. Jerusalem is the fountain-head of religious knowledge, as Athens is of secular.

The English priest's language is suaver than was that of the Italian pope from whom I have already quoted, but beneath the surface he is saying nothing different from the haughty and rude Gregory: "One goes to the Philistines to sharpen one's plow, because secular learning is needed as a training for Christian preaching."

This, then, is the paradox of Oxford. It is a thing of the past, you will say, and came to end soon after the departure of Newman for his spiritual Rome. So in a way it is, and there's the pity of it. The world could not forever rest the higher elements of its civilization on ideas which are mutually destructive: on the one side the human ideal of self-development and individual responsibility, on the other that of self-surrender and vicarious redemption; and in these latter years, having freed ourselves from unquestioning submission to authority, we have eased ourselves of the difficulty of reconciling the two traditions by throwing over the past altogether

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as a criterion of life. The classics have pretty well gone, and if we study them at all it is as if they were dead languages, useful it may be as a gymnastic discipline for the mind and a source of uncontaminated beauty, but with little or no sense that they contain a body of human experience and tried wisdom by which we may still guide our steps as we stumble upon the dark ways of this earth. And so, however our churches may still lift their spires into the air and however our priests may still repeat the sacrifice of the Eucharist, for the world at large the mediaeval meaning and the binding force of these symbols have been forgotten or are fast forgetting; some consolation they may give and some hope they may offer, but it is largely through their aesthetic appeal, and heaven is not in them. In place of the secular tradition of the classics we have turned to science, and in place of obedience to the will of God we are seeking for salvation in humanitarian sympathy with our brother men. And these things are well in their way, but they do not supply and can never supply the comfort and elevation of the other disciplines. Science, with all its perspicacity, can see no place within its scheme for what is after all the heart of humanity and the source of true humanism—the consciousness of something within us that stands apart from material law and guides itself to ends of happiness and misery which do not belong to nature. And humanitarianism, however it may be concerned with human destinies and however it may call upon our emotions, leaves out of account the deep thirst of the soul for the infinite wells of peace; it has forgotten the scriptural promise of peace and the truth which St. Augustine knew: *Quia fecisti nos ad te et inquietum est cor nostrum, donec requiescat in te*—"For thou hast made us for thyself, and our heart cannot be quieted until it resteth in thee."

No, there is a great lack in our life today, which we feel and secretly acknowledge to ourselves, despite much bragging of progress and much outward scorn of the things we have cast away. I shall not expatiate now on this fact, of which many, if not all, of you are at bottom, I think, as fully conscious as I am. At any rate time and the occasion force me to take it for granted, and to beg your consideration of the means at our disposal for restoring what has been lost. And first of all there can be no sound restoration unless

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we can escape that paradox of civilization symbolized by the stones of Oxford. Now one relief from the dilemma is open and sure: we can sacrifice one of the opposing traditions entirely and cling to the other. And for my part, if it is necessary, I am ready to throw overboard all that has come to us from the Middle Ages. The gain for education would in some directions be clear and immediate. To leave Anglo-Saxon to a few specialists and to cut it out of the common curriculum designed for discipline and culture would have happy results in the study of English; to waive the remote and doubtful benefits of Gothic and the old Romance dialects for Goethe and Racine and others who carried on the classical tradition would be a fruitful saving of time.

No doubt there would be a great loss also to reckon with in such a choice. If nothing else, the religious literature of the age is a vast storehouse of intense and purifying passion from which each of us may draw and supply the lack in his individual emotions. You remember the scene at Ostia on the Tiber, when Augustine with his mother, who was now approaching the end of this life, stood alone together at the window looking into a garden, and talked of the things that are to be. And at the last of their speech they turned to the joy that should ravish the soul and swallow it up, when the tumults of the flesh were silenced, and the images of the earth and the waters and the air were silenced, and the poles of the sky were silent, and the very heart grew still to itself, and all dreams and visionary revelations, and every tongue and every sign were hushed in silence; and as they thus spoke the rapture of heaven came so near that this world was lost for them in contempt—*et mundus iste nobis inter verba vilesceret cum omnibus delectationibus suis*. That is the deep emotion that was passed from man to man and from soul to soul through the devastations of the Middle Ages, and with it the ecstatic cry of the saintly mother, *Quid hic facio*, "What do I here?" For those who have not imprisoned themselves in the life of the present, the sermons of St. Bernard, the great prayers and hymns of the church, even the austere dialectic of Thomas Aquinas, are a reservoir from which we may still draw that celestial and intoxicating drink. There are some of us—I confess that I myself am such a one—for whom, because of

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temperament or training, the closing of that source would mean an irreparable loss. Yet we are so impressed by a greater need of the world, that we are ready to lay iconoclastic hands on the whole fabric of the Middle Ages and to sweep it away altogether, with all its good and all its evil. It may be that no such harsh procedure is necessary. Indeed, as I have said, the mediaeval tradition has come to have so little vital force, it is so much a mere *cadaver* for the seminar, that in advocating its elimination from the common curriculum of the schools, we shall scarcely be doing violence to anything useful or sacred. It is possible, furthermore, that, if ever we have another renaissance in our education and the past is taken up again as a living and creative power in the imagination, some means may be discovered to effect that reconciliation between the classical and mediaeval views which the earlier Renaissance desired but could not find.

But that is more or less chimerical. What lies at our hands, and what I believe thoughtful men are more and more beginning to recognize as imperative for our higher intellectual and artistic life, is a clear understanding of the paradoxical nature of the bases upon which education has until recently stood, with the consequences thereof, and a return, if possible, to pure classical tradition and discipline. I am aware that this recognition is still of a vague and ineffective sort, while in practice Greek is certainly losing ground day by day and Latin is scarcely gaining. But a good deal of futile-seeming talk has before now preceded an actual revolution, and who shall say that the tide may not turn at any hour and the classics which we praise and neglect may not almost suddenly step into their own again? At any rate it behooves those who are now teaching Greek and Latin, with a feeling of despair perhaps, to lay to heart what hope they can, and to make sure that, when the change comes, if it do indeed come, they may be found ready and fully prepared to give the world what it needs. Meanwhile they have a plain task and duty. It may seem vague and impractical to talk of maintaining a tradition for some future change in the whole trend of a civilization; there is at least something clear and close at hand which the teacher can do, and which may confer a benefit upon himself and upon what earnest pupils he has.

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In the first place, those who are teaching can effect a certain reform in their methods. We have gained a good deal from German scholarship, but we have also lost something. Let us, if we can, retain the diligence and accuracy which have come from the German seminar, but let us remember that the tendency of the past century has been to make of the classics a closed field for the investigating specialist and to draw the attention away from their value as a literary discipline containing an imperishable criticism of life. That evil has been recognized, and we are trying to remedy it. But at the present time we may be led astray by what may seem in itself a peculiar advantage to the classicist—I mean the discovery of a vast body of Greek writing which lies so to speak on the outskirts of literature, and the unearthing of great archaeological treasures. These things are undoubtedly good in themselves, and they may be used to give a vividness and reality to ancient life such as we have never had. But they contain also a real danger. After all, these inscriptions and discoveries scarcely touch on what is the vital classical tradition—the interpretation of the human heart and those glimpses into the destinies for which we go to Homer and Sophocles and Plato and Lucretius and Virgil. It is possible that archaeology may throw the emphasis on the wrong place and obscure the true issues. I say then, with due deference to those who have more authority to speak than I have, that the first thing to do is to see that archaeology, valuable and interesting as it is, be kept in its proper relative place, and be not allowed to dazzle our eyes by the wonder of its discoveries.

What we need chiefly is a deeper knowledge and finer understanding of those few authors who are really the classics. We need to reassure ourselves that as pure human literature they still stand supreme and unapproached. I for one am ready to avow my opinion, and I believe that no great advance in the classics is possible until this belief is proclaimed boldly and generally, that the *Iliad* and *Odyssey* have a beauty and humanity that no modern epic poet has ever touched—not Milton himself, though I adore Milton this side idolatry. There is no lyric poetry in modern tongues that has the music and exquisite feeling of Sappho's Lesbian songs, or the soaring strength of Pindar's impassioned vision. No one else

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has ever quite caught again the mellow suavity of Horace. No later philosopher has translated the eternal verities into such perfect speech as Plato. I have seen Edwin Booth in *Lear* and *Macbeth* and *Hamlet*, and felt the grip of Shakespeare at my very heart. But I have seen a band of young amateurs present the *Agamemnon* in the Stadium at Harvard, and through the crudeness of their acting and the helplessness of the chorus and the disadvantage of a language I could scarcely follow, I still knew that here was a higher form of drama than anything on the modern stage, and that the art of Aeschylus was profounder and more everlasting in its emotional appeal than Shakespeare's even.

The teacher who desires to impress his pupils with the value and greatness of classical literature must first feel those qualities himself. He may, perhaps, think that my estimation of the ancient poets is relatively overdrawn, though I mean to speak only my sober conviction, but he must at least read those poets, read and read, and steep his mind in their images and phrases. But it is even more important, as things now are, that he should ponder the ideas that underlie the ancient poets and philosophers, their ethical interpretation of individual and social experience, not only as these ideas are expressed directly and didactically, but more particularly in that glancing and suggestive manner which Matthew Arnold meant to convey in his phrase "the criticism of life." For, frankly, if a man is not convinced that the classics contain a treasure of practical and moral wisdom which is imperatively needed as a supplement to the one-sided theories of the present day and as a corrective of much that is distorted in our views, he had better take up some other subject to teach than Greek or Latin. The subject is too large and debatable to deal with in a paragraph. But two famous stanzas from Wordsworth and Coleridge, who did more than any other poets to fashion the higher ethical feeling of the age, may give a hint of where the discussion would lead. You may guess the stanza from Wordsworth:

> One impulse from a vernal wood
> May teach you more of man,
> Of moral evil and of good,
> Than all the sages can.

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Literally taken the idea of these lines is, of course, sheer humbug, and Wordsworth no doubt wrote them in a vein of playfulness; but after all they agree with a good deal of the easy philosophy of the century, and they are the precise poetical equivalent of the scientific study of nature which has displaced the humanities. The other stanza is from *The Ancient Mariner:*

> He prayeth best, who loveth best
> All things both great and small;
> For the dear God who loveth us,
> He made and loveth all.

The sentiment, you will say, is innocent and pious enough, but it points unmistakably to the other tendency of the day, that humanitarian notion of indistinguishing sympathy which is rapidly becoming the religion of the people and the theme of serious literature to the exclusion of other ideals. Now, it is perfectly plain that the whole influence of classical literature is against the exaggeration of these naturalistic and humanitarian tendencies. Consider the meaning of one of Pindar's odes, or of Horace's epistles, or reflect on the ethics of Aristotle; the emphasis is everywhere on distinctions and judgment in place of sympathy, and on the grave responsibility of the individual man for the conduct of his own soul. Bacchylides in one brief memorable phrase has summed up the wisdom of his people: ὅσια δρῶν εὐφραινε θυμόν—"doing what is right in the eyes of heaven, make glad your soul." Unless the teacher is convinced that the pregnant meaning of those words may be used, and should be used, as a corrective of the naturalistic and humanitarian exaggerations of our day, he had better devote his energy to some other subject.

I am assuming, you see, that the classics contain in themselves an ideal capable of relieving us from the undue predominance of both the scientific philosophy and the humanitarianism of the day, but some of you may raise a doubt at this point. It is clear, you will say, that the humanism of the classics may be used to offset the inhumanity of our scientific absorption, but what have they to offer to balance the humanitarian absorption in comfort and the things of this world? How can they alone give us back what we have lost with the disappearance of the mediaeval belief in the

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infinite? This question has been particularly forced upon my mind by reading a book from Oxford, by Mr. R. W. Livingstone, in support of the classical propaganda. Formerly it seemed sufficient to dwell on the aesthetic superiority of Greek art and literature, but of recent years that appeal has been reinforced by an attempt to set forth the ethical and practical value of Greek ideas for men today in the distraction of our own civilization. And so Mr. Livingstone calls his volume of essays "The Greek Genius and *Its Meaning to Us*." The change is well, and may have its effect in time, though at present the new appeal may seem to fall on deaf ears.

Mr. Livingstone is right also in seeing that the crux of the matter is in the sense to be attached to the word "humanism." "There are few more important problems than this," he declares; "is humanism right? Is it right to take a purely human attitude toward life, to assume that man is the measure of all things, and to believe that, even though the unseen may be there, still we can know our duty and live our life without reference to it? That is perhaps the biggest question of the present day." The problem, so far as it goes, could not be stated more vigorously, and no one can read Mr. Livingstone's exposition of Greek humanism without pleasure and enlargement of mind. Yet in the end it is not quite plain that he has grasped the full force of the word. Certain writers, among whom not the least guilty is Professor Schiller, a philosophical Fellow of his own college, Corpus Christi, have deliberately clouded the meaning of "humanism" by confusing it with "humanitarianism," which is in fact its very opposite, and it is not clear that Mr. Livingstone, who may be taken as the spokesman of a common tendency among scholars, has escaped entirely from this entanglement. His praise of the Sophists as the true exponents of humanism, his acceptance of Nietzsche's sharp distinction between the Dionysian and Apollonian aspects of Greek civilization, his emphasis of the exotic side of Plato, and his rejection of Sophocles as the norm of Athenian genius are sufficient at least to raise a doubt in one's mind. "Man is the measure of all things"—no doubt that is humanism; it rejects the divine and the infinite in so far as these are conceived to be superhuman or antihuman, and in this way it is antagonistic to the whole scope

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of mediaevalism; it rejects the superhuman, and, in a sense, the supernatural, but he is far from understanding its full scope who supposes that it necessarily excludes also the higher, even the highest, elements of the human soul itself. The error is not new. The Greeks gave us the sense of beauty, is an old saying, but they did so by limiting themselves to the laws of harmony and proportion; as a compensation the Middle Ages gave us the sense of the infinite. The most eloquent and authoritative expression of this view is Renan's famous Prayer on the Acropolis, in his *Souvenirs d'enfance et de jeunesse*. Standing on that citadel of the old Athenian faith, with the marvelous ruins of the Parthenon before his eyes, he uttered, in words you will remember, his adoration of the Goddess Athena:

> O nobility! O simple and true beauty! Deity whose cult signifies reason and wisdom, thou whose temple is an eternal lesson in conscience and sincerity, I come late to the threshold of thy mysteries. To find thee there were needed for me endless studies. The invitation which thou gavest to the Athenian at his birth with a smile, I have conquered only by reflection and at the price of long labor. . . . .
>
> Dost thou remember that day, under the archonship of Dionysodorus, when a little ugly Jew, speaking the Greek of Syria, came hither, passed over thy sacred place, read thy inscriptions without understanding, and found in thy enclosure an altar, as he thought, dedicated to *the unknown God?* Ah well, this little Jew has won the day; for a thousand years thou, O Truth, wast treated as an idol; for a thousand years the world was a desert wherein no flower grew. . . . . Goddess of order, image of the steadfastness of heaven, to love thee was accounted a sin, and today, now that by painful toil we have come nearer to thee, we are accused of committing a crime against the spirit of man. . . . .
>
> The world shall not be saved except it return to thee and repudiate its barbarian bonds.

So far our scholar goes in his praise of the spotless and radiant beauty of Athena, and then, as the surge of mediaevalism flows back upon him, he turns to its symbol in the great vault of St. Sophia at Byzantium with a cry of homesickness: "A great wave of forgetfulness carries us into a gulf without name. O abyss, thou art the only God!" (*O abîme, tu es le Dieu unique!*).

Now the application of this contrast between orderly finite

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beauty and the infinite conceived as a formless abyss, this opposition of the human and the divine, is doubly false. The Greeks have had no monopoly of the sense of beauty on the one hand, and on the other hand their submission to the laws of harmony by no means excludes that religious exaltation which we call, for lack of a better name, the infinite. Their great creation, their unique contribution to the world, was just the union of beauty and religious exaltation in forms which remain normally human—that, indeed, is humanism in the highest meaning of the word. If a man doubts the uniqueness of this gift he can easily persuade himself by looking at the Elgin marbles, which stood once on the Parthenon before which Renan uttered his prayer, and comparing them with what he may see elsewhere of art and religious decoration. It is, more particularly, a dull soul that can stand before those weather-worn blocks of stone, commonly called the Three Fates, or even look upon their pictured likeness, and not feel, along with their wonder of sheer beauty, the strange lift and thrill of emotion, the mystery of deep opening within the heart to deep, which Renan professed to feel before the *abîme*. There are infinite treasures of beauty that owe nothing to Greece, there are, on the other hand, idols and temples everywhere which strike the beholder with awe, but this human sublimity will be found nowhere else in the world, or if found, whether in the Western Renaissance or in the Buddhistic art of the Far East, can be traced somehow to the influence of Greece. Wherever this influence has not passed, you will find a divorce between measured human beauty and religious exaltation, and an attempt to express the infinite by symbols that are either exaggerated or grotesque or merely vague. The Hindu who wishes to image the divine wisdom will carve an idol with many heads, or if he wishes to set forth the divine power, will give to his god a hundred arms. The men of the Middle Ages knew well enough what is beautiful, but when they undertook to visualize the saint they made him meager and unlovely. Even the cathedrals seek the impression of sublimity by spaces and lines that overwhelm the worshiper with the sense of his littleness; they may be beautiful, but they are not human. Goethe could create beauty, but when he thought of the power which speaks to us so humanly in the Three

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Fates he could only express it in the vague and grotesque symbolism of the mystic Mothers.

The true humanism, which speaks in the stones of the Parthenon, does not possess authority and saving power because the human is there regarded as excluding the divine, but the very contrary. The Elgin marbles merely put into visible form the philosophy of Plato, who was ready to follow as a god any man who knew how to combine in his conduct the law of the one and the law of the many; they express the same truth which Aristotle taught in his Ethics, that virtue is the golden mean of self-control rather than any excess of self-sacrifice, but that the golden mean is rightly known only to him who desires in contemplation to behold the unmoved, all-moving unity. If we forget this composite meaning of humanism, we shall confuse it either with the hard, dry formalism of the pseudo-classics, or with the sentiment of modern humanitarianism.

I do not presume to say that the opposition between the classical and mediaeval traditions may not in some way be reconciled, or that the paradox to which I have been calling your attention is forever insoluble. But I am sure that for those who believe that no great art and no sure comfort for the questing human spirit can come from an education based overwhelmingly on science and humanitarianism, and who hope for a regeneration of the vivifying ideals of the past—I am sure that for such as these the one practical course is to steep their own minds in the great and proved writers of the ancient world, to nourish their inner life on that larger humanism which embraces the spiritual as well as the aesthetic needs of mankind, and then, if they be teachers of the classics, simply to teach as they can, omitting nothing of rigid discipline, however repellent that discipline may be, but giving also to the pupil from the overflowing fulness of their faith and joy.

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THE CLASSIFICATION OF SENTENCES AND CLAUSES

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If you go into any grammar school and visit English classes of the upper grades, you will hear a certain classification of sentences employed—namely, into *declarative*, *interrogative*, *imperative*, and *exclamatory*—and insisted upon as of fundamental importance. It is one of the points in which students are most carefully drilled.

This classification is found, in substance, in all the elementary English grammars in our schools; in the large English grammars of Sweet, Earle, Maetzner, and others; in all our American Latin grammars but one; in various English and German grammars of Latin; in various Greek grammars; in Maetzner's French grammar, Whitney's German grammar, in the recent *Report of the English Committee on Grammatical Terminology*, etc., etc. With a single exception, namely the Hale-Buck *Latin Grammar*, all books that give any scheme give this.

The classification is over two thousand years old. It goes back to Aristotle,[1] whose scheme—a somewhat fuller one, but essentially the same—was: declarative, vocative, optative, interrogative, imperative.

In spite of its venerable history,[2] I believe, and have long taught, that the classification is unsound, and must be abandoned.

Let us get clearly in mind what each class-name is intended to mean.

The word "interrogative" requires no explanation, and the same is true of the word "exclamatory." The word "declarative," as

[1] The scheme of Aristotle is a modification of the scheme of the Sophist Protagoras. Various others were proposed in antiquity, but this one survived.

[2] Whoever wishes to hold to it *because* it was Aristotle's must hold also to Aristotle's "vocative sentences" (which only means vocative words) as one of the classes, must add the class "optative," and must give up the class "exclamatory."

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interpreted by the examples given in the various books (thus, "the horse runs"), means "making a statement of fact." Moreover, a number of writers distinctly say this. Thus one of them uses the formula, "declarative sentences, those that make a statement of fact," and another "A declarative sentence is a sentence which declares or asserts something as a fact," and another, "imputing truth." We will accordingly so interpret.

The word "imperative" is meant to cover something more than the imperative mood proper. As explained in one or another grammar, it serves as a convenient name to include commands, wishes, requests, etc. Thus one author says, "imperative sentences, those that express a command or a wish;" and another states that imperative sentences "express either a command or a request."

We may then draw up the table as follows:

1. Declarative (making a statement of fact).
2. Interrogative (asking a question).
3. Imperative (expressing a command, a wish, a request, and the like).
4. Exclamatory.

The class "exclamatory" is sometimes omitted, sometimes put under "imperative"—the latter a purely fanciful procedure, like the putting of vocatives under the same head, on the ground that they make a demand for attention.

In testing this traditional scheme, it will be convenient to have a number of examples at hand to ring our changes upon. Let us select the following:

1. Declarative: "He is writing," or *scribit*.
2. Interrogative: { "Is he writing? or *scribit?*[1] / "Shall he write?" or *scribat?*[1] }
3. Imperative: "*Let* him write," "he *shall* write," or *scribat*.
4. Exclamatory: "How well he writes!" or *quam bene scribit!*

Now, a sound scheme for the classification of sentences must make an affirmative answer possible for four questions which I am going to put. I will state these questions one at a time, and we will test our scheme for it, and register the answer.

[1] It will be convenient to use the simple form without the interrogative particle *-ne*. Both forms are found in free use.

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1. Is the scheme symmetrical?

The two sentences, "Is he writing?" and "Shall he write?" though in part unlike, are necessarily put together, in the scheme, under the head of *interrogative*. Why are they so put together? Because they both ask a question, and for no other reason. No other element enters into consideration. Then the corresponding non-interrogative pair, *scribit*, "he writes," and *scribat*, "he shall write" (or "let him write"), should likewise be found keeping company. The two verbs bear precisely the same relation to each other in the anti-interrogative form as they bore before in the interrogative form. But *do* they fall together in the anti-interrogative form? No. They part company, one going under the head of the declarative sentence, the other of the imperative. Then the answer to our question, "Is the scheme symmetrical?" is "no."

2. Does the scheme cover all sentences?

On p. 180 of one of our *Lessons in English* I find, under the examples selected for another purpose, Whittier's lines: "For of all sad words of tongue or pen, The saddest are these: 'It might have been.'"

Does "might have been" state a fact? No. It states a past *possibility*, which has *not* become a fact, and never will become one. Neither is it interrogative, imperative, or exclamatory. The scheme has accordingly no place for it. Again, in the same book I find Shakespeare's sentence, "Then 'twere well it were done quickly." "It were well" ("'twere well") does not express a fact; it expresses a *certainty of the mind with regard to an imagined case*. But for such sentences, likewise, the scheme has no place. It accordingly does *not* cover all sentences, and we must register our answer as "no."

3. Are the classes mutually exclusive?

"Let him write" or "he shall write," *scribat*, is imperative. "Shall he write?" *scribat?* is clearly interrogative. But it is also still clearly imperative. It does not cease to be imperative in becoming interrogative, any more than *scribit*, "he is writing," ceases to be indicative in becoming *scribit?* interrogative. Under which one of our four heads, then, shall we class *scribat?* "shall he write?" It will go under *two* heads, imperative and interrogative.

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Then the classes are *not* mutually exclusive, and there is some serious defect in the scheme. Again, then, we must register our answer as "no."

4. Are the classes homogeneous?

The class "imperative" is of what kind? It is a *mood*-class. Are the classes interrogative and exclamatory mood-classes? No. Nobody ever put "interrogative" and "exclamatory" among the moods in writing a grammar, or ever will. These words express ideas wholly unrelated to mood, and accordingly wholly indifferent to mood. "Is he going?" "shall he go?" "would he go?" and the like, are all interrogative without regard to their mood. Then the classes "interrogative" sentences and "exclamatory" sentences are *not* of the same nature with the class "imperative" and cannot be set over against it. The scheme is drawn up on the basis of distinctions of *two kinds of ideas, having absolutely no relation to each other*—as unlike each other, to make a comparison, as sex and stature are. *And neither kind of idea is carried out.* So far as we have now progressed, the traditional scheme is as if we were to divide all mankind, not into male *and* female, nor into tall people *and* short, but into (1) *males* and (2) *tall people*. Once more, then, our answer is "no."

But the classes, on closer examination, turn out to be even more strikingly unhomogeneous than this. We have seen that one of them, the class "imperative," expresses mood, while the classes "interrogative" and "exclamatory" express something quite different from mood. But the remaining class, the "declarative" sentence, instead of doing one or the other of these things, does both. As we have already seen, our grammars say, or imply, that the declarative sentence states a fact. Then "declarative" means both *declarative* (which belongs to the same order of ideas as "interrogative") and *indicative* (which belongs to the same order of ideas as "imperative"). It really means *declarative indicative*. Our traditional scheme, accordingly, contains *three* different kinds of classes—one dealing with one kind of idea, one dealing with another kind, and one dealing with a mixture of the two. To complete our comparison, the scheme, as far as we have gone, is as if we were to divide all human beings into:

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1. Tall males (sex and stature).
2. Male (sex).
3. Tall (stature).

Precisely herein lies the radical fault of the scheme. Precisely this is the cause of its failure to answer our four questions successfully. The divisions of a classification that embraces three different kinds of categories are not homogeneous, *cannot* be symmetrical, and *cannot* be mutually exclusive; nor are they likely to cover all sentences, since a complete list would have to carry out each of two different kinds of distinctions, and all possible mixtures of the two.[1]

And now to solve the problem. It is obvious that we must adopt one kind of ideas *or* the other for the basis of our classification, and carry that idea out. To use our illustration again, we must either complete the categories of sex (male, female), or complete the categories of stature (tall, short, with as many gradations as may be desired, but all dealing with the same matter of stature).

To make our choice in the case before us, we must get a clear notion as to what the two kinds of ideas are. As for the mood-kind, we already recognize its essential nature. We must then fix our attention on the other kind, of which "interrogative" and "exclamatory" form classes.

Let us postpone for the moment the class *exclamatory*, and look at the class *interrogative*.

What is the opposite of interrogative? Or, to put the matter in language that any child can understand, what is the opposite of *asking?* It is *telling*.

Obviously these are the two great functions of sentences. I tell somebody else what I think or want, or I ask somebody else what he thinks or wants. Let us illustrate this.

A sentence may *tell* something. This something may be a fact, as in "he is writing," *scribit;* a demand (the *will* of the speaker), as in "let him write," *scribat;* a wish, as in "may he write," *utinam scribat;* a possibility, as in "he may write," *forsitan scribat;* a certainty in a purely imagined case, as in "he would write" or "he

[1] Aristotle reached his classification primarily from the point of view of a logician. His aim was to lay down a method by which truth might be reached. His starting-point had accordingly to be that form of sentence from which inferences could be drawn, namely, a statement of fact (the "declarative sentence," in the sense in which this phrase has thus far been used). To this, however, Aristotle added other classes, which were truly grammatical.

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would have written," *scribat, scripsisset.* Each of these sentences *tells* the mood-idea (the attitude of mind) of the speaker or writer.

Or, again, the sentence may *ask* something. Thus "is he writing?" *scribit?*; "shall he write?" *scribat?*; "would he write?" "would he have written?" *scribat? scripsisset?* Each of these sentences *inquires about* the mood-idea (the attitude of mind) of the person addressed.

Now we have only to think a moment in order to realize that, whether we tell or ask, every sentence *must* contain a mood-idea, as the above examples do. You cannot make a sentence without a predication, and you cannot use a predicative verb moodlessly. But this is only a part of the whole story. It is equally obvious that you cannot present a given mood-idea (say in the matter of John's presence), without at the same time doing one of two things, conveying it as yours, *or* asking whether it is that of your interlocutor ("John is present," *or* "is John present?").

What is it that does these two different things? The *verb*, by itself, or with the help of modifiers specially attached to it, conveys the mood-idea. *The sentence as a whole* (1) shows the speaker's mood-idea, or (2) asks for that of the person he is talking to. That which a thing does, we call its *function.* The function of the sentence as such is, then, to present the speaker's mood-idea, or to ask for that of his interlocutor. The relation here is one of the "*first person*" to the "*second.*"

But you cannot even *ask* another's mood-idea except by using a verb, and this in itself must inevitably carry a mood-idea. What you really do, then, in asking of another what his mood-idea is, is to *express* a mood-idea and ask if he holds it. The function of a sentence (if we for the moment postpone exclamations) is accordingly to say one of the two following things:

1. My mood-idea is *this.*
2. Is your mood-idea *this?*[1]

[1] Such a question is a "yes-or-no question." There is a second kind, in which the mood-idea of the interlocutor is taken for granted, and the question is one of *detail* (as I have called it in the Hale-Buck *Latin Grammar*), as in "whom shall we send?" But it is not worth while to complicate the exposition by adding this whenever the question is spoken of.

A complete statement would also add, that, instead of speaking to another person, one may frame thought of either kind for oneself alone. But this likewise needs but a single mention.

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Now for the technical names to be used for these two functions. The best name for the second, in English, is the already familiar name "interrogative." For the first, there is no good name. "Enunciative" would be quite perfect, if it didn't sound too learned. "Expositive" ("setting forth") would be perfect, but for the fact that we want, if possible, a corresponding noun and verb; and the noun "exposition" and verb "expose" would not do. "Uttering," "disclosing," "revealing," "conveying," have their individual defects; though "conveying" and "convey," like "expositive," are good in helping to explain the idea. "Declarative," which properly means simply "making clear," would have been a perfect word, if it had not been hurt by being wedded to a mood-idea, that of the indicative. But the best practical thing to do seems to be to accept it, divorcing it of all reference to mood—explaining, for example, that one can declare one's *will* or one's *wish* as well as one's perception of fact, or possibility, or certainty in an imagined case, etc. The scheme will then be:

1. *Declarative* (corresponding noun, *Declaration*).
2. *Interrogative* (corresponding noun, *Question*).

We can now decide whether we want to classify by mood-ideas or by functions of sentences. We want to do both. But we already have a classification of mood-ideas in every grammar, under its proper head of "Moods." What we want for the classification of *sentences* is a classification by functions. We have reached two functions. But these two seem already to have closed the list, in their kind; for every sentence must either convey or inquire.

There remains the class, *exclamatory*. This has been thought of as an alternative for the others, though, as the English *Report* says, "not standing on the same level of importance." On the contrary, it is of an entirely different *nature*. We have to do here, not with a mood-idea, nor with telling or asking, but with the *degree of excitation of the speaker's feeling*. Worcester's *Dictionary* admirably defines "exclamation" as "a sentence of passionate import, or passionately uttered." In English, there is one form of it (referred to in the first part of the definition) which has a special mark in the order, as well as in the punctuation. But (as the

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second part of the definition implies) any sentence may be exclamatory if spoken with heightened feeling, and we accordingly often find statements of fact, commands, wishes, and even questions, with exclamation points following them. Thus, "It is better to sink than to yield!" (Longfellow); "Rouse up, Sirs!" (Browning); "Untouched with any shade of years, May those kind eyes forever dwell!" (Tennyson); "How could you ever do a thing like that!" (a *rhetorical* question, from a conversation).

The source of the existing confusion about exclamations lies in the fact that we have not used a name for the *opposite* of exclamatory. Let us, for lack of something better, use *non-exclamatory*, and define it as meaning *tranquil*, i.e., *spoken with indifferent, or moderate, or controlled feeling*. Then we shall easily recognize that any given sentence, whatever its mood may be, and whether it tells or (in form at least) asks, must inevitably either not-exclaim or exclaim. And we are ready now to see that there are necessarily *three* elements (one from each of the three groups pointed out) of entirely different nature from one another, *coexisting* in every sentence, as color, form, and weight coexist in every object. Every sentence (1) tells *or* asks (2) one *or* another mood-idea (3) with non-exclamatory *or* exclamatory feeling. So little mysterious is the solution of this problem, in which a wrong tradition has steadily ruled since three and a half centuries before Christ!

Besides its value in analysis, the solution will help the student on the practical side, in dealing with punctuation. It was *not* practical to leave him without a means of explaining what he repeatedly encounters, the exclamation point after a declarative indicative sentence, an imperative sentence, etc., etc.

The recognition of the constant antithesis of the functions *declarative* and *interrogative* is also of great help in teaching. For any kind of a mood-idea except one[1], we have a *pair* of ways in which it may be put. Thus we may have a declaration of will, or a question of will ("let us go," *eamus*, "shall we go?" *eamus?*); a declaration of fact, or a question of fact; a declaration of possibility, or a question of possibility; a declaration of certainty in

[1] This one idea is that of wish. A wish can be put interrogatively only through a periphrasis, as in "do you wish that he may survive you?"

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an imagined case, or a question of certainty in an imagined case, etc. The facts are as familiar as getting up and going to bed, and much more frequent. And the statement should be in every grammar.

As for the general classification of clauses, no one but myself, so far as I know, has attempted, or even suggested, a division upon a basis corresponding to that of the classification of sentences. Yet it is most unlikely that the general forms of presenting thought would be changed by the act of subordinating one sentence grammatically to another. We may then reasonably hope to find the leading functions of independent sentences preserved in clauses. And this we do. A clause may *convey* (thus an idea of fact, an idea of purpose, etc.),[1] or it may *inquire* (thus in the indirect question, of many different kinds). But there is also one other function. There are clauses which neither *tell* a mood-idea nor *inquire* about a mood-idea, but *assume* one. Thus in "if I killed him, I killed him with good reason; but I didn't kill him" (Quintilian, 4, 5, 13), the clause "if I killed him" neither tells that I killed him nor asks whether I killed him, but *assumes* the killing, in order to tie something else with it (the conclusion) as inseparable from it. The case would be the same, again, in "if I should kill him, I should kill him with good reason." Our third function of clauses is thus to assume. There are no others. When then we come, in advanced teaching, to the classification of clauses, it will be into—

1. Declarative (corresponding noun, Declaration).
2. Interrogative (corresponding noun, Question).
3. Assumptive (corresponding noun, Assumption).

The condition (*if*-clause) is only one form of assumption. The other is expressed by the help of a general relative of any kind. Thus if I say "the man who wrongs another hurts himself," the clause "the man who wrongs another" does not state that any particular person does this, but merely *assumes* a case. The meaning is the same as in "*if* any man wrongs another."

Clauses are occasionally exclamatory, mostly when they are

[1] In dependent clauses, of course, that which is made known ("declared") may be the purpose, the reason, etc., of a third party or parties. The same may be the case with the question. But this does not invalidate our terms.

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echoes of a more ordinary use. An example of the detached type is "If only I had known ten years ago!" An example of a type arising in echoing what another has said, is seen in the second part of "Tell me what he did." "What he did! What *didn't* he do!" So, also, single words or phrases may be exclamatory, and receive the point, even in the midst of a sentence.

Finally, it may be pointed out that independent sentences are often, though declarative or interrogative in form, really assumptive in effect. Thus in "somebody says 'no,' so do I; somebody says 'yes,' so do I." It seems to me, then, to be a convenient summing-up of the sum total of functions of sentences and clauses to say, in advanced teaching, that:

Sentences and clauses may be:

1. Declarative (telling).
2. Interrogative (asking).
3. Assumptive (supposing).

One formula in particular is often of especial value. Since the indicative is the mood of fact, and since to declare a fact is to make a *statement*, one may say that the indicative is used in *statements* of fact, *inquiries* after facts, and *assumptions* of fact; or, more briefly, that it is used to *state* a fact, *inquire* after a fact, or *assume* a fact.[1]

The whole matter of the classification of clauses in English is one of theoretical consequence only, since the question of the mood is not affected by the choice of the declarative, interrogative, or assumptive form of presentation. In a brief later paper, I hope to show the important practical bearing of the classification upon precisely this question of mood, in Romance, Latin, and Greek.

[1] This formula, which I have found helpful in my teaching in Chicago and at Cornell University (it simplifies the uses of an important mood by reducing them to a few general functions), has found favor, and has already passed into three of our Latin grammars; though in all of these it accompanies the traditional classification of sentences, instead of having suggested a reform in that classification.

I may add that the substance of the exposition now completed was given in a paper (printed afterward for local use) before the Sixteenth Conference of Academies and High Schools held at the University of Chicago in November, 1902, and the results are also incorporated in the Hale-Buck *Latin Grammar*, 1903, and will appear in abstract in the *Proceedings of the American Philological Association* for the current year. But I taught the same doctrine many years before coming to Chicago.

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REPORT OF THE TWENTY-FIFTH EDUCATIONAL CONFERENCE OF THE SECONDARY SCHOOLS IN RELATIONS WITH THE UNIVERSITY OF CHICAGO[1]

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The twenty-fifth annual conference of the University with co-operating secondary schools was held on Friday and Saturday, April 18 and 19, 1913. Reports from those who were most intimately related to its various departments give the impression that this was distinctly the most successful meeting of this sort within the history of the University. This result may be attributed in part to the general interest aroused by the topic announced for the general sessions and the departmental conferences, namely: Economy in Education; and in still greater part by the co-operation of a large number of people, including both officers of the University and high-school superintendents, principals, and departmental instructors.

The main features of the Conference as a whole consisted of (1) the departmental conferences of Friday afternoon, (2) the honor examinations of high-school students, held also on Friday afternoon, (3) the contests for high-school students in reading and in effective speaking held on Friday evening, (4) the general session of the Conference Saturday afternoon, and (5) the Conference luncheon for executive officers of the University and secondary schools on Saturday afternoon. To these features should be added the luncheon given by the University to the visiting high-school pupils and officers in the Hutchinson Commons Friday noon, the supper for high-school girls at Lexington, for the boys at Hutchinson, and for high-school officers at Emmons Blaine Hall. The number of high-school pupils present at the Friday luncheon

[1] Some of the papers given at the Conference will be printed in full in the fall numbers of the *School Review*.

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exceeded the attendance of the last year by more than 125, and as these were present to attend the contests and examinations, it is obvious what this meant for the afternoon and evening occasions. The departmental conferences occupied almost every classroom and auditorium in the quadrangles, and nearly every conference reports a record-breaking attendance. The discussions both in the departmental conferences and in the more general public sessions were regarded as making distinct contributions to the solution of some questions just now uppermost in the minds of college and secondary-school people.

The University Examiner reports that—

Examinations were held Friday afternoon in German, American History, French, Mathematics, Physics, English, and Latin. To these examinations only students from the current Senior classes of co-operating high schools were admitted. To the winner of each examination is awarded a scholarship in the University amounting to full tuition for the next college year. The total number of students competing in the examinations was 251: 39 in German, 25 in American History, 11 in French, 61 in Mathematics, 14 in Physics, 64 in English, and 37 in Latin. Likewise two scholarships were awarded on the basis of contests conducted by the Public Speaking Department. One was a reading contest in which there were entered 29 students, the other a contest in effective speaking in which 44 students competed, a total of 73. In the effective speaking contest each school was represented by a team of two. Preliminary tryouts were held during the afternoon and the final contests were held in the evening. The scholarship in the reading contest was won by Sol Gluckstone of the East Division High School, Milwaukee, Wisconsin, and the scholarship in the effective speaking contest was won by Medard Welch of the Lane Technical High School, Chicago.

The following paragraphs present condensed reports of the departmental sessions of Friday afternoon, which reports were given at the Saturday morning session. The topic common to all these sessions was "Economy in Education."

Biology—

Chairman, OTIS W. CALDWELL, University of Chicago.
Secretary, H. B. SHINN, Carl Schurz High School, Chicago.

Attendance 55

The chairman stated that in a fairly typical botany class of college Freshmen, fully one-third of the students had had botany in the high school, yet no account of this fact was made in grouping the class or assigning the work. This fact was

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further emphasized by Mr. Eikenberry in the results given of a questionnaire conducted through some eighteen colleges and universities of the Middle West. Of these institutions 72 per cent assign students prepared in biology to classes with students unprepared; 90 per cent of the schools fail to recognize any duplication of the work. In no case is any recognition given for one-half year courses. The conclusion is thus apparent that the college expects nothing of the high-school preparation; a later speaker restated this by saying that while there is articulation between the grammar and the high schools and between the Junior and Senior colleges, there is no such smoothness of junction between the college and the high school. Mr. Eikenberry further pointed out that some inequality exists inasmuch as in almost every other subject the college work in that subject begins where the high-school work leaves off. No solution of the problem was suggested.

In speaking of the topic of repetition and duplication, Dr. Galloway emphasized Mr. Eikenberry's conclusion, that owing to differences in equipment, time given, and methods of teaching, there is little or no duplication of work, hence that there is little or no waste on the student's or the instructor's part.

A very strong plea was made by Dr. Galloway for freedom in formulating the college course and for freedom on the high-school teacher's part in teaching the secondary course. In each case local or temporal conditions should largely determine what and how to teach, neither the high school nor the college being absolutely standardized.

In opening the general discussion, Mr. J. I. Thalman held that in most cases it is only tradition that restrains the college from admitting previously prepared students to second-year classes. In order to obviate this difficulty and that of repetition, he suggested two possibilities: first, that where the subject is repeated in college, it be done with new types or forms; second, that the high-school work be given in the second year.

Mr. T. L. Hotzman concluded that the high school is immediately and the college ultimately to blame for such repetition; that the college does not prepare its students to teach a high-school course, but rather one of intense morphology; that the high school should not give work on algae and similar plant forms, for instance, but that it should be more concerned with larger matters of plant growth and habit; and that a zoölogy course should emphasize vertebrates, mollusks, and insects.

Dr. Strong maintained that repetition is really beneficial; Dr. Newman, that there should be college courses in botany and zoölogy on the methods of teaching and that the higher institution should give essential principles, the lower, more nature study; Principal Armstrong, that the high-school course should be laid out more carefully with better correlation of subjects, that there should be various botanical and zoölogical courses offered for variously constituted classes, and that less thoroughness of treatment should be expected of secondary pupils; Mr. Clute, that there should be more nature-study. Pleas for better teaching of physiology were made by Professor Lindle and Mr. Carlson.

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If one were to state two general conclusions from the lengthy and spirited discussion, they would probably be that the high-school courses in botany and zoölogy should be greatly altered, and that the high-school teachers need a different point of view.

Earth Science—

Chairman, ROLLIN D. SALISBURY, University of Chicago.
Secretary, WALTER S. TOWER, University of Chicago.

Attendance 75

The first question considered was: "Can repetition be avoided in the subject-matter of courses in geography and geology?" An affirmative answer was given both in the papers by Mr. James H. Smith, of Austin High School, and Professor Atwood, of the University of Chicago, and in the informal discussion which followed these papers. It appeared to be commonly agreed, however, that such avoidance of repetition would afford time for strengthening the courses concerned rather than permit time to be taken from those courses and devoted to other things.

The second question considered was: "Can secondary-school courses in physiography and commercial geography be made the equivalent of the elementary courses in these subjects in college, so that the student who has had either of them in an approved secondary school can pass at once to the next higher related course in college?"

Mr. Miller, of the University High School, pointed out that any answer to this question must take account of varying factors from school to school, as age of students when the course in question is taken, ability of the teacher, school equipment, and so on. Co-operation between schools and colleges in regard to arrangements of the high-school studies might solve all the problems, except perhaps the one arising from varying abilities of the teachers. Mr. Miller suggested a plan of taking high-school courses as the equivalent of elementary college work in cases of *individuals*, rather than by institutions or by classes.

Mr. Whitbeck presented statistics in regard to instruction in geography in Minnesota, Wisconsin, Indiana, and Ohio, which indicated that geography and physiography are commonly taught by persons without any special training in those lines.

Following this, statistics of grades attained by students in the elementary courses in the University of Wisconsin were presented.

In a class of 120 students, 20 had had one year of high-school work in the subject, average grade of the group 80.4 per cent; 66 had had one half-year in the high-school subject, average grade of that group 81.2 per cent; 34 had had no high-school course in geography, average grade of that group 80.8 per cent, or higher than those who had studied the subject for a full year in the high school.

The conclusion seemed to be that high-school work in geography and physiography does not help the student any when he pursues the college course.

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The third question considered was: "Are there topics of relatively slight value in geography and geology which commonly receive an undue amount of time and attention in high-school and college courses? If so, is it not desirable to eliminate such topics or to curtail this discussion, so as to (1) shorten the course, thus saving time for the student, or (2) gain time for more important matters?"

In the absence of Mr. Pierson, Professor Barrows, of the University of Chicago, read the only paper on this subject. His paper and the discussion following indicated a concensus of opinion on the affirmative side, but with the idea of gaining time for more important matters, as the chief object to be sought.

At the close of the conference it was moved to direct the chairman to appoint a committee, which should be resolved into three subcommittees to investigate further the questions here discussed and to report their findings at the next annual conference.

English—

Chairman, HIRAM B. LOOMIS, Hyde Park High School, Chicago, Ill.
Secretary, L. W. SMITH, Thornton Township High School, Harvey, Ill.

Attendance 125

The paper by Mr. H. V. Church, Principal of J. Sterling Morton High School, Cicero, Illinois, on "Use of Scientific and Industrial Material as a Part of the Course in English in the High School" was read by a member of the faculty of that school. From the point of view of the Conference the most significant point of the paper was the fact that the fourth-year work in English is given only to pupils who do not expect to go to college. This fourth-year work consists in the history of English literature together with the use of such classics as will best illustrate the types of literature touched upon in this historical review. The idea in this method of treatment is that pupils who do not go to college should have this more or less technical treatment of the history of literature while those who do go to college had best reserve their study of the subject for college where it can be done more satisfactorily. This plan seems to result in a distinct economy in the high-school course in English.

The title of the second paper was "Repetition and Duplication in School and College Work," by Miss Alice Bidwell, Freeport, Illinois. Miss Bidwell had made a careful study of the courses of English in the various high schools to discover, if possible, if there is a duplication of work in the high school and college. It was found that many schools do work of a technical nature which should be reserved for college treatment. In some places the classic *Beowulf* is given in the high school; in others the subject of the drama is studied in a very technical and exhaustive manner. This represents distinct waste, since this type of work can better be done in college and since high-school pupils have not reached the stage of development where they can approach it with any degree of appreciation.

The third topic was "An Experiment in the Teaching of Freshman Literature," treated by Professor Boynton of the University of Chicago. The position

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was taken in this paper that although many of the same topics in literature and composition are treated both in high school and college, this duplication in subject-matter does not always represent waste. In college the pupil approaches the subject from a new point of view by a different method and from the standpoint of greater maturity.

No resolutions were passed by the conference to gather up the results of the discussion into definite proposals, yet the above seemed to stand out clearly as the net result of the conference.

French—

Chairman, WM. A. NITZE, University of Chicago.
Secretary, ELIZABETH WALLACE, University of Chicago.

Attendance 42

Mr. Babcock read a paper on the topic: "Is the Use of Phonetics an Economy in Teaching Elementary French?" The speaker strongly advocated the use of phonetics in the classroom from the beginning, maintaining:

1. That the old way of teaching does not give satisfactory results—while the phonetic method gives accuracy, is an economy of time, develops mental power and vigor and incidentally prepares a pupil for reformed spelling.

The discussion was opened by Mlle. Favart of the Hyde Park High School and was participated in by six others. All advocated the use of a phonetic system but differed widely as to the system. The next subject, "In What Respects Is Elementary and Intermediate French a High-School Subject?" was treated in a paper by Mrs. Lockwood of the Wendell Phillips High School.

The discussion was opened by Miss Angus of the University High School. It was brought out that the greatest weakness in the teaching of French was the lack of uniformity in the results, brought out by the diversity of methods, that if this diversity could be modified so that results could be uniform and determinable the elementary and intermediate French might eventually become exclusively an elementary and secondary school subject.

It was moved that a committee be appointed by the chair, composed of members of the Romance Department of the University and of teachers from affiliated secondary schools, for the purpose of considering unified teaching.

German—

Chairman, MISS JOSEPHINE DONIAT, Carl Schurz High School, Chicago.
Secretary, MISS LYDIA SCHMIDT, University High School.

Attendance 75

The committee of high-school teachers appointed to arrange a program for the departmental conference in German prepared a syllabus for a three years' course in German, and sent this to all of the prominent high schools within a radius of 150–200 miles from Chicago. In general the committee recommended that less than heretofore be attempted in a three years' course in German, but that the work undertaken be done more thoroughly. The study of the

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classics and the formal study of literature were therefore not included in the course outlined.

The conference was opened by Mr. Charles Goettsch of the University of Chicago, chairman of the Syllabus Committee, who, in his suggestions for bringing about economy of the pupil's time and effort, dwelt on the importance of the proper selection of a text and emphasized the necessity for clearness and simplicity in the presentation of the material. He urged that the recitation period be made not so much an occasion for finding out what the pupil has prepared at home but that it should rather be an occasion for developing new material with a view to reducing the home work as much as possible. He also spoke of the importance of putting the beginning classes into the hands of strong teachers.

Mr. Schacht, of the Wendell Phillips High School, in opening the discussion of the first year's work, spoke of the difficulties and waste involved in teaching classes composed of a mixture of pupils from the Freshman, Sophomore, and Junior classes. He also emphasized the desirability of putting beginning classes in the hands of experienced teachers, inasmuch as a good foundation is indispensable for satisfactory work in the later years.

Miss Hochbaum led in the discussion of the work of the second year.

Mrs. Worden discussing the third-year work commented briefly on the syllabus and advocated a reduction in the amount of work required of the teachers of German so that the total number of hours required should not exceed that of the teachers in other departments.

In the discussion which followed these papers the general opinion seemed to be that the committee had included more work in grammar in the first two years than could be done thoroughly.

A discussion arose regarding the best method of developing the pupils' ability to speak German. Professor Cutting of the University effectively answered the question by stating that the German used in connection with the grammar work and in the conversation and discussions connected with the texts read offered the only opportunity worth considering in drill work of this kind. It was further pointed out that the aim in the conversational work should be a reasonable one and that the use of simple sentences only should be insisted upon.

The teachers were much in sympathy with the proposal of the committee that less be undertaken but that thoroughness be insisted upon. The prevailing opinion was that considerable reading of medium difficulty should be the aim of the course rather than a more limited amount of difficult reading.

A resolution was passed that in the opinion of the teachers present the syllabus presented by the committee could be a great help in planning the high-school course in German. It was decided however to postpone the study of the relative pronoun to the second year and the study of the passive voice, subjunctive of indirect discourse and unreal condition, to the third year.

The committee presented a syllabus[1] of minimum requirements, which, while retaining desirable flexibility, would, if generally adopted, bring about greater

[1] This syllabus will be printed in full in a later issue of the *Review*.

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unification of the work in our secondary schools and eliminate much of the present wastage between successive courses, teachers, and institutions.

Greek and Latin—

Chairman, ROBERT J. BONNER, University of Chicago.
Secretary, WILBERT L. CARR, University High School.

Attendance 75

Two reports were made; one by a committee appointed last year on the minimum requirements in form and syntax for the high-school course in Latin; the other by a committee from the Latin section of the Chicago high-school teachers' organization, on a broader and more attractive Latin course for high schools.

The first report, read by the chairman, Miss Frances Sabin, of Oak Park High School, after considerable discussion, was referred back to the committee, final action being deferred until next year.

The second report, presented in printed form by Mr. H. H. Matteson, of the Waller High School, recommended for the second, third, and fourth years' reading a wide variety of authors, to be used as substitutes for all or a part of the traditional requirements in Caesar, Cicero, and Virgil. A large list of supplemental texts, many of them costing only thirty-five or forty cents, was included in the report, and combinations suggested for each year's work. After some discussion, on motion by Professor Hale, the section voted its satisfaction with the report and expressed the hope that the suggestions made in the report might be adopted.

Mr. H. F. Scott, of the University High School, discussed and demonstrated the use of perception cards on which were printed vocabulary and inflectional forms. Some advantages gained are speed and accuracy on the part of the pupils.

History—

Chairman, MARCUS W. JERNEGAN, University of Chicago.
Secretary, ARTHUR F. BARNARD, University High School.

Attendance 50

The question "Is There Duplication of High-School Work in History in the First Year of the Junior College?" was discussed from the standpoint of the college by Mr. A. E. Harvey of the University of Chicago.

Mr. Harvey's main points were as follows: There are roughly three types of high-school courses in history; 1, those offering a one-year course in ancient history; 2, those offering a four-year sequence, i.e., ancient, mediaeval, modern, English, and American history in conformity with the recommendations of the committee of seven; 3, those offering a three-year sequence, i.e., ancient and mediaeval, modern European, American history in accordance with the more recent report of the committee of five.

The speaker considered the question of duplication from the standpoint of material, method, and emphasis. As regards material, the junior-college course covers the same ground as the course in mediaeval and modern history in the

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high schools of class 2. In this instance there is duplication of subject-matter to a greater or less degree according to the tastes and preferences of the individual instructors. In the high schools of class 3 the duplication of subject-matter is negligible, as the emphasis is placed on English history in the high school and on continental conditions in the college.

In method, according to the speaker, there is a wide difference between the work of the high school and that of the college. In the former the textbook-recitation method is used almost universally and there is little note-taking. In the latter the lecture-recitation method is employed and the student is trained to take notes. The whole work is on a higher plane.

There is also a difference in emphasis. In the high school the emphasis is on facts rather than events, the "what" rather than the "why." In the college the judgment is cultivated by the weighing of evidence, and the scientific habit of mind by the study of cause and effect.

Thus it seems that the duplication is confined to subject-matter. The speaker voiced the opinion that duplication was not undesirable in view of the well-known complexity of European history. In the statistics collected by Mr. Harvey only 15 out of 88 students in the junior college believed that they should have taken more advanced work; 59 out of 88 were of opinion that the courses differed essentially in subject-matter, and 82 out of 88 that they differed essentially in method.

The question was considered from the standpoint of the high school by Mr. Parker of the Quincy High School. The aims of the teacher are, first to cultivate the memory, imagination, but more particularly the judgment and reasoning power; second to cultivate a taste for historical reading that will last through life; third to give the student a broad grasp of the developments of modern history; fourth to enable the student to understand better the world in which he lives.

As to methods, the up-to-date teacher shows his students how to study history by building up systems of relationships and thus actually organizing the historical material. In giving out a lesson he is not satisfied with a page assignment, but shows the pupil the inner anatomy of the lesson, that each paragraph is a unit and must be mastered as an organic whole, and that there is likewise a thread of unity connecting the paragraphs of the lesson; further, that the great unifying idea of the lesson may be considered as the effect of a precedent cause, and the cause likewise of some as yet unconsidered effect. In the recitation the student is given freedom of thought and expression but always under the guidance of the teacher.

As to material, the textbook is used in preference to the syllabus. A certain amount of collateral reading is demanded.

The papers were discussed by Miss King of Oak Park, Miss Durbin of Englewood, and Miss Osgood of the Faulkner School. A brief general discussion followed. There seemed to be general agreement to the effect that except for

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unusual students and the best high schools there is little duplication under present conditions.

The conference adopted the following resolutions: "That it is desirable for the average pupil who has taken European history in the high school to repeat it in college; that some administrative device be adopted by which the exceptional student may be excused from such course or courses."

Home Economics—

Chairman, DEAN MARION TALBOT, University of Chicago.
Secretary, MISS MILDRED WEIGLEY, DeKalb High School.

Attendance 60

The conference was opened with a paper by Miss Jenny H. Snow of Chicago Normal College on "The Part of the High School."

Miss Snow's paper suggested that the mass of material, unclassified and unorganized, relating to home economics which has come in as a result of scientific research, forces upon the high school, not so much the problem of *what* we are to teach, as *how* we are to present material. In order to determine this, the motive in high-school home-economics work must be considered.

Inasmuch as this subject is being taught largely because of its direct influence on the home, Miss Snow believes that the work should be given from the economic rather than from the scientific point of view, not with any idea of eliminating the scientific principles which underlie so much of the home-economics work, but rather with that of emphasizing the economic. Science courses, it is thought, should not be required as a prerequisite for home economics but through home economics the girls should be led into organized science work thus giving science a meaning to the girls.

The discussion that followed concerned itself largely with the following problems: First, the relation of the science to the courses in home economics. Shall we ask for more science work as preliminary to home economics or may we legitimately carry it on without this science work? While opinions on this were not unanimous, the majority felt that the home-economics work in the first years, leading the girl into the science later, was preferable to requiring prerequisites of science.

Second, the planning of courses that shall be suitable for high-school students rather than the attempted use of what is really college work.

Last, the desirability of a general science course to be given in the first year of the high school.

At the close of the discussion it was resolved:

1. "That there is need of more definite formulation of high-school courses in the belief that if the need of the high-school girl is really met there will be no duplication in college."

2. "That a general science course in the first year of high school is desirable for students of home economics."

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3. "That in view of the changing conditions the economic, social, and civic aspects of household life be emphasized, especially the economics of consumption."

Manual Arts—

Chairman, FRANK M. LEAVITT, University of Chicago.
Secretary, WILSON H. HENDERSON, Hammond, Indiana.

Attendance 50

The topic discussed in the manual-arts section of the Conference was the articulation of high-school manual-arts courses with general college work.

In all of the papers, and in the ensuing discussion it was noted that such courses undoubtedly contribute greatly to the success of the rest of the high-school work and to the subsequent life-work of a large number of pupils, whether they attend college or not. It was maintained that these more general values outweigh the specific value of the manual arts as college-preparatory subjects and amply justify the high school in administering manual-training courses in any event.

In the discussion of the narrower question, the value of manual training as a college-preparatory subject, the objections of the technical universities to giving credit for high-school manual-training and drawing were taken up in considerable detail and the position of such objectors shown to be untenable, and it was made evident that the attitude of several technical colleges is distinctly less liberal than many general and classical colleges.

The following quotation from one of the papers well expresses the evident opinion of those present regarding this matter of articulation: "If in order rightly to connect with college it is necessary that there be continuity of work, the same courses of instruction carried on in unbroken line, then there is no hope at present for pupils of manual-arts courses except in a very few strictly technical colleges. Two roads may join, however, without going in the same direction. All that is necessary is that a traveler may pass from one to the other without inconvenience. We maintain that if a pupil on leaving a manual-arts course is prepared to carry successfully the work of a given college, he is ready for that college. We hold that if a pupil, who has finished a four years' high-school course, has the ability to do Freshman work in college, he ought to be given credit for all of that high-school course, whether classical or manual arts."

This whole discussion emphasized the desirability of authentic information regarding the degree of success attained in junior-college work by students entering the University with liberal entrance credit for manual training and drawing.

Perhaps the most significant point made, so far as the University of Chicago is concerned, was that relating to the preparation of teachers of manual and industrial training. It was shown that one reason why manual training does not articulate better with college work is because of the difficulty of securing manual-training teachers who have any acquaintance with the higher institutions. It was shown that it is practically impossible to find any considerable number of men who will give four years to college preparation, unless in these four years

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they can secure a liberal amount of necessary technique; that is to say, an amount enabling them to teach successfully in high schools.

Another quotation from one of the papers is as follows: "Now if colleges and universities are really interested in helping solve high-school difficulties, here is one to try their mettle. There is a most urgent demand all over our country for trained vocational teachers. I know of no profession in which the demand so far exceeds the supply. Let the colleges and universities establish courses for teachers, to which actual tradesmen may be admitted. In Indiana our recent law provides that up to 1915, schools may employ as teachers, without examination, skilled workmen regardless of scholastic attainments. We would really prefer that these men and women have training added, but where is the course for teachers to which the fact that they are skilled artisans admits them? These men and women direct from the trades have narrowly specialized training and they are called upon to teach more broadly than they have practiced. Such a teachers' course in a university as suggested would add the needed breadth. I understand the University of Wisconsin is beginning a work of this kind." Subsequently the plans of the University of Wisconsin for carrying on this work were discussed.

At the close of the meeting the following resolutions were adopted as covering the major considerations of the conference:

"WHEREAS, The major purpose of instruction in the manual arts in the high school is to contribute directly to the vocational efficiency of the pupils, and

"WHEREAS, It is still a debatable question whether manual training in the high school will contribute materially to the subsequent success of an individual, *as a student* in the universities other than technical, and

"WHEREAS, No one seems to doubt the value of such training for *success in life* after or without college training and experience, and

"WHEREAS, The University of Chicago has already recognized this general value of manual training in the high school, and gives liberal entrance credit for such work, and the University, therefore, is in a peculiarly advantageous position to collect data on the above mentioned debatable question, therefore

"*Be it resolved:* That we earnestly request the University of Chicago to investigate the matter for the purpose of throwing such light on the question as a study of the records may reveal."

Mathematics—

Chairman, H. E. SLAUGHT, University of Chicago.

Secretary, BEULA SHOESMITH, Hyde Park High School, Chicago.

Attendance 85

Harry O. Gillet of the School of Education of the University of Chicago, presented the subject, "Economies in the Course in Mathematics," from the standpoint of the elementary school, showing how one year had been saved without loss of efficiency, with the result that pupils from the seventh grade are this year prepared to enter high school. This result has been accomplished after two years' experiment in the University Elementary School by avoiding unnecessary repetition, stimulating active thinking, and organizing the course of study on a psychological basis.

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Frank O. Hester of Lane Technical High School, Chicago, considered the topic from the standpoint of the high school, suggesting that waste of time might be avoided and efficiency increased by eliminating certain topics in secondary mathematics, by shortening the time spent on drill, and by treating mathematics as a unified subject rather than several separate subjects, thus utilizing cross applications in algebra, geometry, and trigonometry.

H. E. Cobb of Lewis Institute, Chicago, discussed the subject in connection with the work of the junior college, showing how from one to two years can be saved by studying recent developments and modifying the course in accordance with the real needs of the student. Time should be saved for the student who enters the vocations before finishing the college course as well as for those who complete the course. This might be accomplished by replacing abstract work by practical problems and by making the conditions in school like those without. The question of waste here is one which concerns the individual teacher as well as the administrative officers.

Among those who contributed to the general discussion which followed were Mr. McGuane, Miss Henry, Miss Mable Sykes, Mr. Morgan, Mr. Donecker, Mr. Connor, and Miss Jaynes of the Chicago schools, Mr. Walter Slocum, principal of the Carl Schurz High School, Mr. Erwin of the Joliet Township High School, and Professor Wilczynski of the University of Chicago. The following resolutions were passed:

"*Resolved*, That the Mathematics Conference use its influence to increase the time for all high-school mathematics from four periods a week to five.

"*Resolved*, That this conference go on record as recommending greater departmental activity in the way of conferences among mathematics teachers."

Physics and Chemistry—

Chairman, C. R. MANN, University of Chicago.

Secretary, E. S. BISHOP, University High School.

Attendance 40

Mr. W. H. Courson, of the Anderson, Indiana, High School, in a paper entitled, "Wastage in High-School Physics and Chemistry," pointed out that only 2 per cent of high-school graduates go to college, and that the greatest wastage in the present practice of physics teaching is in teaching courses which prepare for college, rather than adapting the course to the local needs of the community. He partially indicated how this end might be accomplished in rural communities by teaching the application of physics to farm machinery and the soil. He also drew attention to the wastage in time and effort resulting from girls taking the usual courses in physics and chemistry, rather than courses the applications of which should be taken from the physics and chemistry of the household.

Mr. B. W. Kelly, of Richmond, Indiana, showed how the teacher could prevent wastage of time by a better organization of the course in both the lecture-table demonstrations and the laboratory work. He presented a carefully thought-out method of handling the laboratory notes. He drew attention to the necessity

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of teaching algebra and arithmetic with a slight physics flavor, by using other letters than x, y, and z to denote unknown quantities, and by teaching mensuration and decimal fractions.

Mr. Hermann Schlesinger of the Department of Chemistry, University of Chicago, in discussing the "Co-ordination of High-School and College Chemistry" showed how the University is attempting to correlate the two but that in so doing a certain wastage of time resulted for students entering the University with high-school chemistry. These students complete the general course in chemistry in the University in two quarters, whereas those entering without chemistry require three quarters. Thus in the former case about 300 hours is spent on general chemistry, 120 in the University and 180 in the High School, whereas if all the general chemistry is taken in the University 180 hours is required, a saving of 120 hours. He also showed that, if we consider one hour in the University at their advanced stage of maturity worth two hours in the high school, the wastage in time for those entering with chemistry would be only 30 hours. Mr. Schlesinger then very forcibly pointed out the cause of the inability of the University further to correlate its course in general chemistry with high-school chemistry as being due to the student's lack of independence, responsibility, and intellectual maturity. He attributed this lack of independence to the American attitude toward our children, the tendency to make things too easy for them. We do not encourage them to fight out their own difficulties. We direct and help them too much so that they never acquire the habits of independent thought.

The Program Committee for the Conference of 1914 is constituted as follows: *Chairman*, Spencer R. Smith, Principal, Wendell Phillips High School, Chicago; *High-School Representatives:* Superintendent Sandwick, Deerfield Township; Superintendent Wirt, Gary, Indiana; Miss Frances Sabin, High School, Oak Park; *University Representatives:* Professors Judd, Mann, and Goettsch.

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EDUCATIONAL NEWS AND EDITORIAL COMMENT

SOCIETY OF COLLEGE TEACHERS OF EDUCATION

Since the last announcement, the following new members have been added to the Society:

Bonham, Milledge G., Associate Professor of Education, University of Louisiana, Baton Rouge, La.

Book, W. F., Professor of Educational Psychology, Indiana University, Bloomington, Ind.

Burnham, W. H., Professor of Pedagogy and School Hygiene, Clark University, Worcester, Mass.

Carter, Alexander, Secretary College Teachers of Education, University of Missouri, Columbia, Mo.

Coleman, H. T. J., Associate Professor of Education, Toronto University, Toronto, Canada.

Davidson, Percy F., Associate Professor of Education, Leland Stanford Junior University, Stanford, Cal.

Gambrill, Bessie E., Professor of Education, Alfred University, Alfred, N.Y.

Inglis, Alexander J., Professor of Education, Rutgers College, New Brunswick, N.J.

Jones, A. J., Professor of Education, University of Maine, Orono, Me.

Pakenham, William, Professor of History of Education, University of Toronto, Toronto, Canada.

Rhoton, A. L., Professor of Education, Georgetown College, Georgetown, Ky.

Robertson, C. B., Professor of Secondary Education and Supervision, University of Pittsburgh, Pittsburgh, Pa.

Smith, H. L., Professor of School Administration, Indiana University, Bloomington, Ind.

Storm, A. V., Professor of Agricultural Education, University of Minnesota, Minneapolis, Minn.

Updegraf, Harlan, Professor of Educational Administration, Northwestern University, Evanston, Ill.

Weber, S. E., Professor of Education, Pennsylvania State College, State College, Pa.

Williams, Henry G., Dean of the State Normal College, Ohio University, Athens, Ohio.

AN INTRODUCTORY VIEW OF GREEK

Inspired by a suggestion in the *School Review* for January, I am experimenting with Greek in my Cicero class. I began February 26

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by putting the Greek alphabet on the board. Thanks to the Greek-letter fraternities, to which this at least may be credited in a Greekless generation, the pupils recognized about half the letters at once. They were left on the blackboard and on the third day the class could read them all, less than five minutes a day having been spent on them. Then I wrote the first line of the *Iliad* with its translation, and spent perhaps ten minutes pronouncing and explaining the words, calling attention to Latin and English derivatives or associated words and to similarities with Latin forms and constructions. Every day or two I took a few minutes to have the line read in concert or by individuals, saying that some day I should ask them to write it from memory.

Giving a Cicero test on the eighth of March, I asked the class to write this line as well as possible, trying to remember all the accents and breathings. The result was surprisingly satisfactory. I then presented the second line, and, on March 19, the third line in the same way. On April 9, after a ten days' vacation, I called for the three lines together. In almost all cases the words were given correctly, but there was considerable confusion over accents and breathings, so I said I would ask them to study it for the next day, and to be able to write it with entire accuracy. This is the only time I have assigned work outside of class.

From these three lines the class has learned the nominative, accusative, and vocative singular, and the accusative plural of the first declension; the dative and accusative plural of the second; and one form of the accusative singular of the third. They have also been introduced to the connection between Greek and English in such words as mania, ode, theology, myriad, theme, epithet, hypothesis, parenthesis, polygon, and similar compounds, psychology and project. I plan to teach the first seven lines of the *Iliad* in this way, and then probably the first ten lines of the *Odyssey*. At present I am feeling my way along without very definite plans, but it seems to me that, having learned nineteen lines of Homer by heart, next year they will be able to enjoy parallel passages in the *Aeneid* and the *Odyssey*, and to read some episode, perhaps that of Nausicaa, without entrenching unduly on the required work in Latin.

This method will not, of course, lead to a very exhaustive knowledge of Greek, but I am inclined to think that it will have considerable linguistic value and give not a little pleasure. At present the class seems to be enjoying the experiment as much as I am, and several have asked if I will not have a regular Greek class next year. Their enthusiasm is due in part, doubtless, to the novelty; in part, perhaps, to the fact

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that most of the class was with me last year, and I have systematically seized every opportunity to tell them about Greek, to give them glimpses of its charms, and to make them realize that they were missing a great pleasure in not being able to study it.

ELSIE GARLAND HOBSON
Frances Shimer School

STATISTICS ON HIGH-SCHOOL FAILURES AND WITHDRAWALS

A group of high-school principals representing about fifteen schools in the immediate vicinity of Chicago meets once a month to discuss problems of high-school administration. Among the topics which this club has found it profitable to discuss is the number of withdrawals and failures in high-school courses. The following general table (p. 415) is made up on the basis of thirteen detailed reports.

The figures given for withdrawals include all who left the course before the examination. Some withdrew for the reason that they were failing, but these were not separated from those who withdrew for reasons unrelated to their scholarship. The significance of withdrawals, as compared with failures, comes out in the comparison of different classes. Thus compare English I with Latin I. In many cases the students in English remain in the course and fail rather than withdraw. This is doubtless due in part to the fact that English is required of all students. In Latin, on the other hand, students withdraw after they have tried the course for a short time. The percentage of withdrawals is accordingly greater than the percentage of failures. There is a very surprising percentage of withdrawals in manual training.

The table suggests the desirability of comparative material of this type from a large number of schools.

NATIONAL CONFERENCE COMMITTEE

The sixth conference of the National Conference Committee on Standards of Colleges and Secondary Schools was held at the rooms of the Carnegie Foundation, 576 Fifth Ave., New York, N.Y., on Wednesday, February 19, 1913. Delegates were present, representing the College Entrance Examination Board, the New England Association of Colleges and Preparatory Schools, the New England College Entrance Certificate Board, the Association of Colleges and Preparatory Schools of the Middle States and Maryland, the North Central Association of Colleges and Secondary Schools, the Carnegie Foundation for the Advancement of Teaching, and the Bureau of Education.

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	No. Pupils Enrolled	No. Pupils Withdrawn	No. Pupils Failed	Percentage Withdrawn	Percentage Failed	Total Loss
English I	1,075	98	109	9.1	9.4	18.5
English II	723	57	63	7.9	8.7	16.6
English III	627	41	49	6.5	7.8	14.3
English IV	422	28	20	6.6	4.7	11.3
Total	2,847	224	241	7.9	8.5	16.4
Algebra I	914	118	157	12.9	17.2	30.1
Algebra II	386	54	44	14.0	11.4	25.4
Plane geometry	397	61	74	15.4	18.6	34.0
Solid geometry	74	7	4	9.5	5.4	14.9
Trigonometry	73	7	3	9.6	4.1	13.7
Latin I	660	98	71	14.9	10.8	25.7
Latin II	470	34	51	7.2	10.9	18.1
Latin III	188	10	7	5.3	3.7	9.0
Latin IV	82	1	1	1.2	1.2	2.4
German I	402	51	49	12.7	12.2	24.9
German II	249	17	11	6.8	4.4	11.2
German III	119	11	1	9.3	.8	10.1
German IV	10	0	0	0	0	0
French I	238	20	18	9.4	7.6	17.0
French II	102	8	2	7.8	2.0	9.8
French III	25	0	0	0	0	0
Spanish I	12	4	0	33.3	0	33.3
Ancient History	836	109	97	13.0	11.6	24.6
Med. and Mod. History	385	45	31	11.7	8.1	19.8
U.S. History	279	23	11	8.3	3.9	12.2
Physics	278	24	15	8.6	5.4	14.0
Physical geography	157	10	26	6.4	16.6	23.0
Botany	278	29	38	10.5	13.7	24.2
Zoölogy	136	26	14	19.2	10.3	29.5
Chemistry	198	31	12	15.7	6.1	21.8
Physiology	360	60	59	16.7	16.4	33.1
Commercial geography	143	18	18	12.6	12.6	25.2
Commercial arithmetic	293	31	45	10.6	15.4	26.0
Bookkeeping	208	26	14	12.5	6.8	19.3
Stenography	215	25	5	11.7	2.3	14.0
Typewriting	128	7	13	5.5	10.2	15.7
Freehand drawing	154	13	0	8.5	0	8.5
Mechanical drawing	218	19	19	8.7	8.7	17.4
Science	127	12	8	9.5	6.3	15.8
Design	233	7	3	3.0	1.3	4.3
Hygiene	20	4	1	20.0	5.0	25.0
Household art	150	22	4	14.7	2.7	17.4
Domestic science I.	139	9	4	6.5	2.9	9.4
Domestic science II.	116	6	1	5.2	.9	6.1
Manual training wood	208	43	10	20.7	4.8	25.5
M.T. forge foundry	75	6	3	8.0	4.0	12.0
M.T. machine shop	26	1	1	3.9	3.9	7.8
Pottery	45	6	0	11.1	0	11.1
Economics	41	1	3	2.4	7.2	9.6
Civics	56	7	4	12.5	7.2	19.7

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A subcommittee reported the results of an investigation of the use of the terms "honorable dismissal" and "statement of record," which it had made by individual conference and by means of a questionnaire sent to eighty colleges and universities. This report stated that there was general agreement among the colleges and universities as to the desirability of the standardization of these phrases, as to the acceptance of a student's freedom to continue in the institution issuing the transfer papers as the criterion for the granting of such papers, and as to the great advantage of entire frankness of statement in the issuance of them. The report contained also a resolution defining the proper use of these terms which, after slight modification, was adopted in the following form:

Resolved that the term "honorable dismissal" should be used to refer to conduct and character only, and that honorable dismissal should never be given unless the student's standing as to conduct and character is such as to entitle him to continuance in the institution granting the dismissal. Furthermore, there should in every instance be given, in the statement of honorable dismissal, full mention of any probation, suspension, or other temporary restriction imposed for bad conduct, the period of which restriction is not over when the papers of dismissal are issued.

That the term "statement of record" should be used to refer to the recorded results of a student's work in the classroom, and that this statement should in every instance contain all the important facts pertaining to the student's admission, classification, and scholarship. In particular, no partial or incomplete classroom record (for example, with failures omitted) should ever be given without clear evidence that it is partial or incomplete; if the student's scholarship has been such as to prevent his continuance in the institution issuing the statement of record or to render him subject to any probation, suspension, or other temporary restriction, the period of which is not closed at the date of the record, a plain statement of any and all such facts should be included; and such information should be given as will make clear the system of grades employed, the number of exercises per week devoted to each course, etc.

The same subcommittee presented a review of some of the difficulties found in the application of the definition of the unit adopted by the Committee at its meeting of October 9, 1909, and proposed a resolution providing for the addition of a paragraph to the explanatory statement then formulated. This resolution was adopted so that the entire definition of the unit now stands as follows:

A unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work.

This statement is designed to afford a standard of measurement for the work done in secondary schools. It takes the four-year high-school course as a basis, and assumes that the length of the school year is from thirty-six to forty

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weeks, that a period is from forty to sixty minutes in length, and that the study is pursued for four or five periods a week; but, under ordinary circumstances, a satisfactory year's work in any subject cannot be accomplished in less than one hundred and twenty sixty-minute hours or their equivalent. Schools organized on any other than a four-year basis can, nevertheless, estimate their work in terms of this unit.

A four-year secondary school curriculum should be regarded as representing not more than sixteen units of work.

An ambiguity in the interpretation of the definition of the admission Latin requirement announced by the Commission on College Entrance Requirements in Latin in October, 1909, having been brought to the attention of the Committee, it was decided to send communications to the chairman of that commission, to the American Philological Association, and to the College Entrance Examination Board asking that steps be taken to remove the difficulty by an authoritative pronouncement on the subject.

The committee considered the question of the assignment of unit values to the new definition of the admission requirement in English and voted that, as a tentative arrangement, equal values be given to (1) the grammar and composition, and (2) the reading.

Among the questions assigned to a subcommittee for consideration and report at the next meeting are the following: the literal interpretation of the definition of the unit; the greater unit value of the work of the latter years of the secondary-school curriculum as compared with the work of the earlier years; the effect on the unit of work in any subject when it is accompanied or preceded by work in allied subjects; the assignment of unit values to the definitions of the admission requirements in the subjects, algebra, English, and history; and the accrediting of candidates for admission to college from secondary schools which give instruction in only one foreign language.

Officers were elected for the year as follows: President, Headmaster Wilson Farrand, Newark Academy; Vice-President, President A. Ross Hill, University of Missouri; Secretary-Treasurer, Dean Frederick C. Ferry, Williams College.

The subcommittee which had served for the past two years was continued for investigation and report at the next meeting. This committee includes Headmaster Wilson Farrand, Dean Frederick C. Ferry, President Henry S. Pritchett, and Principal Frederick L. Bliss.

The next conference was appointed for February, 1914, or for such earlier time as the subcommittee might select.

FREDERICK C. FERRY, *Secretary*

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FRATERNITIES

The following news item is copied from the *Chicago Tribune:*

A movement aimed at the destruction of the high school fraternity and the rehabilitation of college fraternities in the respect of the general public was launched at a meeting of the Chicago Alumni club of the Delta Upsilon fraternity and guests from other fraternities held last evening at the University club.

Fraternity men who attended the gathering appeared to regard the meeting as of the gravest importance. It was pointed out by various speakers with a good deal of seriousness that the Greek letter societies of the middle west are virtually face to face with a life and death fight as the result of adverse legislation, particular reference being made to the bill providing for the abolition of fraternities in the University of Wisconsin now pending before the Wisconsin legislature.

Unless the fraternities organize to oppose this wave of legislative opposition, it was pointed out, the probabilities are that two years from now secret societies will be abolished in most of the schools of the Mississippi valley.

Two resolutions were adopted. The first contained a general call to the Greek letter societies of the country to a general meeting to be held later to consider the matter of fighting such legislation as now is under consideration in many middle western states.

The second suggested to the national convention of Delta Upsilon to be held in Rochester, N.Y., next fall, the advisability of instructing all chapters to pledge no high school fraternity members after 1916.

Edwin H. Cassels presided, and the principal speaker of the evening was Ralph W. Jackman, who is actively engaged in fighting the anti-fraternity bill now before the Wisconsin assembly.

Mr. Jackman declared that, from a fraternity point of view, the situation at Madison is most menacing. The socialistic element among the legislators, he said, were fighting for the anti-fraternity bill tooth and nail. The movement there, as in other middle western states, he said, was being fostered by a society of the University of Wisconsin called the Commons, which is perfecting a national and highly efficient political organization.

Mr. Jackman said, however, he believed the Wisconsin bill would be beaten. He counted confidently on a majority of five votes against it. The opposition, he said, claimed a majority of eleven votes based on a roll call on the question of abolishing high school frats. He did not believe this claim well founded.

The real fight, however, he said, will come two years from now, when the Commons proposes to renew the battle all over the country. The fraternities must be prepared for it.

Mr. Jackman virtually entered a plea of guilty to the charge of snobbishness which has been urged against the fraternities of Wisconsin in the legislature of that state.

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"There are a number of fraternities in the university," he said, "which are composed almost exclusively of snobs and whose right to exist is based on nothing. One fraternity there has a rule that no nonfraternity man shall be invited to attend fraternity parties. One sorority has a rule that no girl shall go to the party with a nonfraternity man."

The charge of immorality in the fraternity houses and of lack of studiousness among fraternity men as compared to "barbs" he did not think well founded.

Henry W. Austin, Alpha Delta Phi, declared that the high school fraternity is a menace of the college fraternity and the sentiment was cheered.

"I can't see any excuse for their existence. We should do all we can against them."

John C. Hanna, Beta Theta Pi, principal of Oak Park High school, also denounced high school frats.

HARVARD ENTRANCE REQUIREMENTS

At the time that the new Harvard entrance plan was adopted the opinion was freely expressed that Harvard was "letting down the standard." The following statement shows how little justification there was for this type of anxiety.

A summary of the marks made during the first half-year by members of the Freshman class has been announced at Harvard, and from the statistics issued it is possible to compare the work of the men who entered under the new plan with that of students who entered under the old plan. In the class of 1916 there are 453 men who entered under the old plan, this being a percentage of 76.1, while only 142 men, or 23.8 per cent, came in under the new plan. The number of honor grades is distinctly in favor of the students who entered the college under the new scheme of examinations. Over 42 per cent of the new-plan men received honor grades while the percentage of the old-plan men who received such grades is but slightly over 21 per cent. In the Freshman class of last year the scholarship was somewhat higher, nearly 45 per cent of the 1915 men entering under the new plan receiving honor grades and 26.5 per cent of the students entering under the old plan receiving such grades. The marks of the classes of 1915 and 1916 are distributed as follows:

CLASS OF 1916

Grade	Old Plan		New Plan	
	No. Men	Percentage	No. Men	Percentage
A	113	4.9	71	9.7
B	396	17.2	237	32.6
C	1,072	46.6	320	44.1
D	532	23.1	78	10.7
E or F	186	8.0	20	2.6

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CLASS OF 1915

A	141	5.3	48	11.8
B	564	21.2	135	11.8
C	1,182	44.5	177	43.4
D	597	22.5	38	9.3
E or F	174	6.5	9	2.3

GENERAL SCIENCE FOR THE HIGH SCHOOL

The National Education Association has appointed a Committee on General Science. All persons interested are invited to co-operate with this committee in finding out what is good material to present and what are good methods to use.

It has been suggested that we gather lists of questions which young persons ask of parents and teachers in search for information in the field of science, such as: What is the sun? How does it keep hot? Why does it sometimes turn red? What gives the clouds so many different colors? Are we liable to be killed by meteors? Why does our food come from so few plants? How do they quarter-saw lumber? Why are engines always so hot? Why don't we have to light electric lights?

A lawyer testifies that in his profession he has found of great value the general science course which he took a generation ago, consisting of the Geological Story Briefly Told and the stories of half a dozen other sciences briefly told. Many intelligent men have testified that what they need particularly is general information in the field of science. It has been suggested that teachers, parents, and grown-up persons in general send to the committee lists of facts in science which they by years of experience have found worth while to know.

It has been suggested that lists be prepared of the incredible things persons say and do which show the need for instruction in general science and show what instruction is most needed.

Suggestions for organizing common-sense, developing gumption, etc., are in order. Lists of problems are suggested in the field of natural science which require diagnosis at the hands of the ordinary person. In this age of machinery life is becoming increasingly embarrassing to those who regard all mechanisms as uncanny. That education which its devotees are pleased to call the humanities but which seem to leave its disciples incapable of serving humanity is becoming daily more inadequate.

Lists of aims for this work are desired as also lists of sources of information. Lists of fundamental principles have been suggested. It has been suggested that no syllabus be prepared of work expected of

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all schools alike but rather let it be urged that each teacher should adapt his work to local conditions. It has been suggested that any good work must be considered good preparation for the following years of high school and college. Facts which will be needed in the future years of any course at school are best taught when they are needed and when they are to be organized for some purpose. It is suggested that sample lessons be published in detail to guide inexperienced teachers in the best method of presenting topics in general science. Several courses in general science have been already published indicating the progress in this matter up to the present time.

All who are interested in this matter are invited to make further suggestions, to criticize those already made, and especially to make some constructive contributions which will in each case be credited to their authors in the published reports of the committee.

Communications should be addressed to the chairman of the committee, Mr. John F. Woodhull, Teachers College, Columbia University, New York City.

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BOOK REVIEWS

The Iliad of Homer. Translated into English Hexameter Verse by PRENTISS CUMMINGS. An Abridgement Which Includes All the Main Story and the Most Celebrated Passages. Boston: Little, Brown & Co., 1912. Pp. xliv+497. $1.00.

Year after year the Homeric sphinx continues to claim her victims, and bold adventurers approach her rock, undeterred by the fate of their predecessors, to try their luck at one of her two riddles—the unanswerable Homeric question ("that philological scandal" Professor Shorey has well called it) and the alluring, baffling, insoluble problem of translation. Mr. Prentiss Cummings, a bold adventurer indeed, has essayed the solution of both enigmas. This latest American version of the *Iliad* is a reprint in one volume of the two-volume edition of 1910, omitting the appendix. In his carelessly written introduction Mr. Cummings rashly offers one more theory as to the origin and growth of the *Iliad*, an inquiry that lies far outside of the province of a translator, as Matthew Arnold pointed out. His guess at the Homeric question might have some interest for us, if he had illustrated his theory in his translation and given us his conception of the original Homer's epic on the Wrath of Achilles, as Fick has done by a German version of his Aeolic *Urmenis*. But Mr. Cummings wants to get in, not only "all the main story," but also "the most celebrated passages." Suffice it to say that he holds the opinion that "at least three great authors had a hand in the composition," and that in his translation he has retained practically everything which he attributes to the first and the second Homer and "the best of the third Homer's work." Yet he omits many a famous passage (for instance, all of Book iii); and he has unfortunately neglected to number his lines, and in some cases to indicate even the books of the *Iliad*. He gives, in fact, about half of the *Iliad*. Besides the omissions there are numerous condensations, generally in feeble paraphrase, and occasionally there are tasteless additions, most notable of which is the couplet about Paris (p. 447):

> Who, when the goddesses brought for his judgment the apple of Discord,
> Gave Aphrodite the prize who promised him Helen, his ruin.

The remarks on English hexameter in the introduction are more judicious and worthy of consideration than those on the composition of the *Iliad*. Unfortunately the translator is far from observing with complete fidelity the principles he has himself laid down. His verse abounds in trochees for spondees and in such forced substitutes for dactyls as "rolling-eyed," "worst-looking," "mis-shapen," "barley-meal," "high-thundering," "little girls," "Prayer-Maidens," "dishonored," "short of gold," "I at least," etc. It abounds in

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words abused to suit the rhythm, in misplaced pauses, and even in hypermetrical lines.

The translator tells us that he has not "adhered consistently to the Greek spelling of certain names of which the Latin form is familiar in English"; and he gives us such inconsistencies as "Aineias," "Olympos," "Phoibos," "Phoinix," "Tuchios," "Poluaimon," side by side with "Hector," "Menelaus," "Teucer," "Meleager," "Phylomedusa"! There are also misspellings, such as "Chaimaira" (p. 83), "Hipoplakion" (p. 96), "Eurimedon" (p. 135), "Pyrlartes" (p. 301), "Amphidimas" (p. 437), "Euristheus" (p. 153), "Delopians" (p. 200).

Mr. Cummings' translation is generally faithful to the meaning of the Greek. His verse is often smooth and readable, there are even occasional felicities; yet the result cannot be called at all successful, for the simple reason that his work is not poetry. The divine fire of the original (*θεσπιδαὴς πῦρ*) has paled and cooled to dull ashes in the process of transition. The same thing is true of most attempts at translating Homer. None but a true poet can perform the Promethean miracle of bringing down celestial flame from its native empyrean; the Titan's task is too great for mere mortals. Rossetti, himself a successful translator, has well said that "the life-blood of rhythmical translation is this commandment—that a good poem shall not be turned into a bad one." And Mr. Cummings has turned the greatest of Greek poetry into English verse that is often very bad indeed; his translation has certainly far less of poetry in it than the plain prose of Messrs. Lang, Leaf, and Myers. There is space for but a few citations. A fine couplet of almost Shakespearean sententiousness suffers such treatment as this at his hands:

> Lost is that man to tribe, to social usage, and homeless,
> Whoso, his people among, promoteth palsying discord (ix. 63 f.).

Other typical examples follow:

> Cupbearers wouldn't hold out, and many a decade go thirsty (p. 50).
> Leaving their master to roll from the car down side of the car-wheel (p. 73).
> Surely my day draweth nigh to be called once more "darling Bright-Eyes" (p. 153).
> Thrice he sent forth a yell,—man's head could hold nothing louder (p. 234).
> First having gone to a black-water fount and lapped to repletion (p. 291).
> Leave life's ultimate threshold my last sights visions of horror (p. 402).
> See, that is, if thou carest to look, and such things interest thee (p. 192).
> Albeit fearless is Hector and doeth unlimited talking (p. 113).

(This is not only vile English but a gross mistaking of the Greek: the last words should be "insatiate of battle," but the translator has carelessly read *μύθου* for *μόθου*.)

> Many a time hath over me swept an impulse to marry,
> Settle down, and rejoice in the wealth which Peleus possesseth (p. 194).

> Thus ascertaining how Troy feeleth now, this man having fallen,
> Whether abandon their high-walled town, or stay and defend it (p. 423).

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These lame hexameters the "strong-winged music of Homer"! Yet Mr. Cummings declares that "a translation should be such that the reader will feel that he is reading poetry"!

It is perhaps unreasonable to complain of a translator because he is no poet—poets are generally better occupied than in translating—but when a translator who employs verse expresses himself in a way that would be intolerable even in newspaper prose, it is surely a serious crime. This version abounds in examples of baldly prosaic, colloquial, vulgar, and slovenly diction, and no fidelity to the sense of the original, no occasional felicity of phrase or smoothness of versification can atone for such handling of a noble and beautiful poem. Here are some specimens: "skulk" (as a noun, pp. 99, 112, 134, 189, 458); "panicky" (p. 124); "drooling" (p. 200); "slazy" (p. 51); "the whole of us" (p. 22); "what meaneth thy tears?" (p. 27); "most unhonored of any" (p. 34); "death thou facest, and dare not" (p. 18); "thou foully entreated" (p. 19); "fooled round" (p. 50); "squelching this word-slinging scold" (p. 60); "go right back and sit down" (p. 113); "the Trojans ran every which way"; "many a Trojan and mighty were making assault" (p. 236); "run over to Nestor's" (p. 242); "smashed his head to a jelly" (p. 276); "no great as a warrior"; "right under the nose of the Trojans" (p. 334); "a batch of tripods" (p. 362); "in a pet while playing at jackstones" (p. 437); "the Trojans hanging around in the court"; "ye loafers" (p. 460); "'twould be reprehensible very" (p. 474); "the outfit" (p. 380); "hate which proddeth to quarrel" (p. 349); "Thetis hath talked thee around" (p. 37); "tipping the wink" (p. 179); "the wound quite gurgled with blood" (p. 248); "a need insupportable longer" (p. 242). These are but a few out of scores of examples of bad diction; in fact, it is not too much to say that one can hardly read a dozen consecutive lines on any page of the book without falling into some shocking bathos.

The conclusion of the whole matter is that Mr. Cummings is no Oedipus, and the sphinx's riddle remains unsolved. His failure is like that of innumerable predecessors whose work has been cast into the abyss of oblivion—the failure which Chapman, pioneer of English translators of Homer, so admirably characterized in the case of his own predecessors in Latin, Italian, and French:

> They failed to search his deep and treasurous heart;
> The cause was, since they wanted the fit key
> Of Nature, in their downright strength of Art,
> With Poesy to open Poesy.

HERBERT H. YEAMES

HOBART COLLEGE
GENEVA, N.Y.

Public Education in Germany and in the United States. By L. R. KLEMM. Boston: Richard C. Badger, 1911. Pp. 350. $1.50.

Dr. Klemm's *European Schools* and *Chips from a Teacher's Workshop* came out many years ago. For nearly half a century he has given valuable

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service to the schools of his adopted country in Cleveland and other cities and in the Bureau of Education at Washington. In his preface he states: "Having received an unmistakable warning that human strength is not inexhaustible, I hasten to complete the book, which will preach my last sermon, unadorned but full of good will to mankind."

This personal note seems necessary in beginning a criticism of this new work. Dr. Klemm has gathered together nearly fifty articles, addresses, and papers for preservation. Naturally they are of uneven merit. The topics range from comparisons of American and German schools to discussions of summer colonies, coeducation, self-government, civics, geography, the work of girls, etc.

There is an evident attempt at fairness and often that spirit is maintained for many pages, but it seems hard for the author to recognize as excellences tendencies which did not enter into his own training. His urgent and insistent opposition to women teachers and to coeducation leads him at times to trivialities. He gets well into a suggestive chapter on "English, a Dead Language?" and then becomes so interested in telling of many derivations of words that the main issue disappears. In another case opposition to certain tendencies leads to a disparaging remark about an experiment considered important by many school men; yet in an article published in this book written by J. Tews of Berlin there is a call for changes in German schools along these very lines of condemnation. We need unsparing criticism in all the fields the author enters but it would be more effective if he got more thoroughly into the meaning of the tendencies objected to. Thus the elective system with all its faults has a much deeper significance than the submission to adolescent whim and caprice which a foreign reader might gain from this work.

FRANK A. MANNY

BALTIMORE TRAINING SCHOOL FOR TEACHERS

A Cyclopedia of Education. Edited by Paul Monroe. Volume III. New York: Macmillan, 1912. Pp. xi+682. $5.00.

This new volume of the *Cyclopedia of Education* maintains the same high standard of excellence attained by the first two volumes. The fields of educational history and biography continue to be well handled. Further valuable articles on the educational systems of states and countries and special articles dealing individually with colleges and universities continue to appear in this volume. The extended article on "German Education" is one of the notable contributions.

The articles dealing with the special subjects of study form a special feature of this as of the preceding volumes. Among the more important of these articles are those on "Geography," "Geology," "Geometry," "History," "Greek," "Latin," "Language" (including English language), "Grammar," and a full and interesting discussion of "Artificial Languages." In each

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instance the history of the subject as a specific body of material is outlined, its present educational status is defined, and the various methods of teaching it now in vogue are described.

The student of administration will find the article on "Grading and Promotion" a real contribution as well as a useful summary. Those interested in the psychological phase will find the articles on "Habit," "Heredity," "Instinct," "Imitation," etc., of much value. Professor Dewey's discussion of various topics in the philosophy and psychology of education are especially welcome and useful; among these may be mentioned "Idealism and Realism," "Idea and Ideation," "Judgment," "Infancy," "Knowledge," "Interest," "Induction and Deduction."

This volume, as the preceding ones, contains a series of short articles dealing with methods of teaching in both its general and specific phases. As illustrative of the latter one many mention the one on the "Grube Method."

Education and the delinquent child is well treated in such articles as "Juvenile Delinquency" and "The Junior Republic." The Kindergarten in both its historical and current aspects and tendencies is fully and suggestively presented. Professor Burnham contributes in this connection a much-needed discussion of "The Hygiene of the Kindergarten," as well as other useful articles on various phases of hygiene in different parts of the volume. We should not omit to mention the article on "Industrial Education" and the one by Boas on "Growth," as having special interest and value in their respective spheres.

While, in general, a high standard of excellence is maintained there are some articles which impress the reader as being inferior on account of a certain "off-hand," sketchy method of treatment. One feels in reading them a lack of a penetrating insight into the subjects in question. Of such articles may be mentioned the ones on "Intellect," "Introspection," and "Invention." The discussion in each case is decidedly commonplace and unilluminating.

IRVING KING

UNIVERSITY OF IOWA

Government in the United States: National, State, and Local. By JAMES W. GARNER. New York: American Book Co., 1911. Pp. 416.

This textbook presents the leading facts concerning the organization and activities of national, state, and local government in the United States, placing special emphasis upon the physiology of government, i.e., upon its workings and administration. Besides the subjects common to the majority of elementary works on government, such chapters as "Suffrage and Elections," "Political Parties and Nominating Methods," "Federal Finances, Taxation, and Money," "The Regulation of Commerce." and "Citizenship" suggest a break from the beaten paths and a reading of the work shows originality in method and scope. Fifty-six pages are devoted to local government, one

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hundred pages to state governments, and the remainder to the national government, which is followed by the Articles of Confederation, the Constitution of the United States, and an index. While one might wish that local government had been more fully treated, yet these proportions seem justified by the fact that the work is intended for general use. In fact, a satisfactory account of local government can be given only by a state edition, and with this in mind the work is admirably suited to a general course in elementary government. References to general works, illustrative material, and suggestive research questions follow each chapter. These have been carefully and wisely chosen and enable the teacher and student to enlarge the scope of the subject.

It would be difficult to find another textbook bearing the mark of such high scholarship and at the same time written in such a lucid, readable style as this work by Professor Garner. It is thoroughly up to date, and deals at the same time only with the permanent features of government. This is not to say that such subjects as the initiative and referendum, the lobby, commission government of cities, and other recent accretions of doubtful permanence are omitted from discussion. These have their place under proper divisions and arguments pro and con are presented concerning them; nor is the author's well-informed opinion withheld concerning present conditions and tendencies. In the opinion of the reviewer this is the best book of its kind that has yet appeared.

A typographical error is noted on p. 298 where "present" should read "presence."

The American Republic: A Text in Civics for High Schools, Academies, and Normal Schools. By S. E. FORMAN. New York: The Century Co., 1911. Pp. 359.

This book, which is based upon the author's *Advanced Civics*, is divided into three parts. Part I may in general be said to deal with the theoretical side of government as applied to American conditions. The author believes this part will give the foundation for a course in civics. The wisdom of this in a high-school text may be doubted, since many general, sweeping statements are made which are confusing and inaccurate. For example, it is meaningless to say that "government pilots society through the sea of man's passions and cruelty and selfishness"; it is inaccurate to say that "government which receives its powers from the people is a democratic or popular government"; nor is it strictly correct to assert that the Constitution (federal) is a "creation of the people of the United States" or that "a city or a town or a county is governed by the people who reside within its borders." All these statements are taken from a single page (4). They are but partial truths, and though in later chapters they are modified, in the opinion of the reviewer it would have been better to have described the government as it actually developed in America and as it actually is at the present time and to have omitted

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the theory entirely. It is true that at the end of the chapters "notes" of explanation are added. But the explanation often clouds rather than clarifies the subject. Common law, for instance, it is asserted (p. 157), "consists of a set of rules and principles which have not been promulgated by a legislature, but which have grown out of custom and usage and have been gathered from political decisions and from the opinions of jurists." In the same paragraph we read that "common law may be said to be unwritten, for its rules are not formulated in written documents." This statement may seriously be questioned. Walker, e.g., in his *American Law* (p. 53) says that common law "is the stupendous work of *judicial legislation*. Theorize as we may, it has been made from first to last by judges." And what are the opinions of judges but written documents? That the author's opinions are not clear to himself or that his statements are misleading to scholars is not the question; but this work is not intended for scholars but for elementary students, and these statements are cited merely for the purpose of calling into question the advisability of attempting to present abstract and theoretical subjects to beginners in civics.

Part II deals with the organization of government, national, state, and local, the government of territories and dependencies, and party organization, while Part III describes the functions and services of government under such chapter headings as defense, international relations, taxation, national finance, state finance, public debt, currency, commerce, elections, education, corporations, labor, crime, charities, and the police power. Questions, notes, and suggestive exercises, and topics for special work follow each chapter and are valuable aids in stimulating further study of the subject. Numerous illustrations are also interspersed throughout the work.

Introduction to Political Science. By RAYMOND GARFIELD GETTELL. Boston: Ginn & Co., 1910. Pp. 421.

With the growing interest in the social sciences in colleges and universities and among thinking people in general, there is need for a book that will give a general outline of political science. In the words of the author, "the chief purpose of this book is to combine in brief compass the essentials of political science . . . . by showing the interrelations among the various divisions of the subject, to bring out more clearly the essential unity of the state."

The work begins with a list of general references and a list of periodicals containing material of importance in political science. After a brief survey of the nature and scope of the subject the work is divided into three parts—"The Nature of the State," "The Organization of Government," and "The Ends of the State." Each of these three divisions is analyzed and discussed in its various phases—Part I under such chapters as "Origin of the State," "Theories of the State," "Sovereignty," "Forms of the State and of Government," and "Constitutions"; Part II under the "Electorate," "Separation

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and Division of Powers," "The Legislature," "The Executive," "The Judiciary," "Political Parties," and "Local Government"; Part III under two chapters, "The Province of Government" and "The Functions of Government." These chapter headings suggest the general scope of the work. There are, in all, twenty-five chapters, each preceded by a general outline and a list of references to standard works bearing upon the subject. These references are, with few exceptions, to works written in, or translated into, English, but they form a very good list for outside reading for the average student, and that is what the work is intended for. While the author "aims to add little to the sum total of human knowledge," the work shows a wide reading and a mastery of materials and it certainly is a real contribution to those who wish to give a general course, in colleges and universities, upon this subject. It is an excellent textbook to place in the hands of students and forms a good basis for a wider study of political science, and, best of all, it is written in a clear, forceful style.

KARL F. GEISER

OBERLIN COLLEGE

Agricultural Instruction in the Public High Schools of the United States. By CLARENCE HALL ROBISON. New York: Columbia University, 1911. Pp. viii+205.

This book by Dr. Robison, which is No. 39 in the Teachers College series, 'Contributions to Education," assembles the results of a prolonged and expensive investigation of the subject discussed. The wide range of data collected is well organized, and the items have been presented for the most part in comparable units.

A brief explanatory introduction is followed by chapters on Agricultural Education (8 pages), The Public High School (28 pages), Some Typical High Schools Teaching Agriculture (42 pages), Administration, Equipment, and Methods (16 pages), Preparation and Salaries of Teachers of Agriculture in the High Schools (14 pages), Special Secondary Schools of Agriculture (25 pages), and Problems of Agricultural Instruction in the Secondary School (40 pages). There are also two appendices, one of which reviews the legislation pertaining to agricultural instruction in the public high schools, and the other presents a list of references on agricultural education. These references are chiefly supplementary to the bibliographies in the Bureau of Education bulletins by L. H. Bailey and J. R. Jewell.

The chief values to the reading public of books typified by this one under review, are two: the source material made available, and the constructive suggestions which the author may somewhat mature in the course of his work. The first-hand materials presented by Dr. Robison were secured by questionnaire replies, catalogues and records, personal visits, and state reports, as well as data secured directly by the author from summer schools, administrative

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officers of agricultural colleges, special agricultural schools, and special reports of the United States Department of Agriculture, the Bureau of Education, State Boards of Agriculture, the National Education Association, and various addresses. A very specific table of contents, an index of tables, and the general index render the materials assembled readily accessible for rapid use.

The constructive conclusions are summarized in twenty-four brief paragraphs. These suggestions are developed by the definitive discussion of the problems of agricultural instruction in the secondary schools, which runs through the forty pages of the last chapter. The outstanding problems are specified by the terms—time, equipment, teachers, textbooks, methods, and special schools. The necessity of adapting agricultural instruction to the community, the value of home garden work, and the need of giving additional preparation to teachers already well grounded in science, are emphasized. In general, it is concluded that one responsible for agricultural instruction must work out an aim and philosophy underlying it; and that the attitude of patrons is usually favorable, while the interest of pupils is directly related to the quality of instruction.

Productive Farming. By KARY CADMUS DAVIS. Philadelphia: J. B. Lippincott Co., 1911. Pp. viii+357.

This is a book intended to suit the needs of rural schools of all kinds, and grades in village and city schools chiefly below high-school rank. There is also some likelihood of the use of this book as a text in small high schools where a limited teaching corps and abbreviated laboratory facilities make a longer course of instruction in the subject impossible.

An introduction on "The Teaching of Agriculture" emphasizes the fact of the rapid growth of the demand for instruction in practical subjects in the public schools; discusses the importance of establishing a public conception of the fundamental relation of agriculture to the national welfare; defines the opportunities in country life for able and ambitious young people; and makes pointed suggestions to teachers about the use of reference materials, time-saving, correlation, using exercises, and the development of community interest through the organization of juvenile clubs affiliated with the school.

The book is in five parts. Part One presents "Plant Production" in 220 pages, including a discussion of soils. Part Two discusses "Animal Production" in 85 pages. Part Three is a 15-page consideration of "Animal Products" and is chiefly devoted to the pure-milk problem. Part Four makes a concise survey of the business propositions of farm management. Part Five is an ample appendix presenting twelve reference tables for use in carrying out the work of instruction involved in a thorough handling of the text. There is a 9-page, double-column index, which makes practically every detail in the book immediately accessible.

Textbooks for beginners in agriculture are increasing rapidly—too rapidly

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for the actual use of such books to have time to give to all the validity of successful experience in classroom tests of their fitness. However, this book by Mr. Davis, who is the professor of agronomy in the New Jersey College of Agriculture, commends itself by the extreme care used in the choice and arrangement of materials, as well as by the clear English and by the excellent typographical and illustrative features used to clarify the text.

ERNEST BURNHAM

KALAMAZOO, MICHIGAN

Gramatica Castellana. A Spanish Grammar for Schools and Colleges. By EVERETT WARD OLMSTEAD and ARTHUR GORDON. New York: Henry Holt & Co., 1911. Pp. 501. $1.40.

A recent communication from Washington, D.C., contains the following: "Portuguese as well as Spanish should be taught in the schools of the United States, in order to prepare for the increased trade relations with Latin America after the opening of the Panama Canal, declares William A. Reid, an investigator of Latin-American conditions, in a special report to the Southern Commercial Congress—Portuguese for Brazil and Spanish for the other countries. 'With these two languages the young American business man will be in a position to transact business with twenty Republics of South America.' . . . . Mr. Reid points out that even now many North American business houses are greatly handicapped by lack of men with a working knowledge of Spanish to handle correspondence from Latin countries. 'To establish successful business relations with a people, we must know something of their language, customs, manners, and life.' "

The so-called "Grammar" indicated in the caption of this article is eminently well adapted to give the beginner the foundation necessary for such a "working knowledge of Spanish."

There are fifteen pages of the usual introductory matter with the unusual fact that all the topical headings are in Spanish (as well as in English) although the discussion is in English.

There are the usual divisions of the lessons into the text treating of technical matters, the vocabulary, the Spanish exercise or reading-lesson, the composition in English for retranslation, and the questions on the lesson. In these questions, however, an unusual feature is introduced: they cover not only the reading-lesson but the text in such a fashion that it is an easy matter for the pupil to be prepared to recite entirely in Spanish. The first vocabularies and the reading-lessons contain the words in daily use in the classroom so that by the time the third lesson is reached (as stated in the reading exercise) the learner's vocabulary is "large enough to name the things in the classroom and to talk of the lesson."

The names of the members of the family, of articles of clothing, parts of the body, terms necessary in travel, the divisions of time; the life of a Spanish

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family, the hours and names of their daily meals, forms of address, the religious festival of San Ignacio de Loyola (in later lessons other Spanish feasts) form a second group of lessons. The next group, in the form of letters of friendship, introduces matters of interest in the cities of Seville and Salamanca. The last group contains selections from such noted authors as Ibañez, Valdés, Alarcon, in which are presented phases of life characteristic of Valencia, Andalusia, Santiago, and the mountain districts, and the conflict between the old and the new ideals; in closing there is given a selection from Castelar which presents the bullfight from a "Spanish viewpoint."

The "Appendix" contains the usual paradigms of the regular verbs, lists of irregular verbs with page references to the more complete treatment of each, and "is intended to be complete enough for subsequent reference. Particular attention is called to such novel features as the lists of verbs requiring or not requiring prepositions before the following infinitives, the names of animals and the sounds that they make, the geographical adjectives, the nicknames of persons, the brief but comprehensive treatment of Spanish prosody, and the examples of epistolary style" (the authors in the "Preface").

There are also 5 pages of poetical extracts and 11 pages of prose readings from Spanish authors. The book is furnished with both Spanish and English vocabularies and an index.

For the mature student the lessons are none too long for single assignments; for the more immature they readily lend themselves to division into two or three parts, as suggested in the "Preface."

This text is an attempt to combine the "natural" and the "grammatical" methods. It should prove a "usable book" both in high schools and in colleges. The lines of interest are not too difficult for the one nor too simple for the other. The reading-matter is sufficient in quantity and variety for a year's work with students in the second and third years of their high-school course. It gives the spirit of Spanish life and thought without emphasizing the picaresque element.

CARRIE E. TUCKER DRACASS

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CHICAGO

Applied Biology. By MAURICE A. BIGELOW and ANNA N. BIGELOW. New York: Macmillan, 1911. Pp. xi+583. $1.40 net.

Teachers' Manual of Biology. By MAURICE A. BIGELOW. New York: Macmillan, 1912. Pp. vii+113. $0.40.

Bigelow's *Applied Biology* has now been in the hands of teachers long enough for many of them to find that it is a most teachable book, while the more recent appearance of the *Teachers' Manual* to accompany the main text will doubtless make it still more acceptable and usable in the classroom. A careful examination of the contents of both these volumes leads to the

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impression that the authors have been more successful than many of their predecessors in combining into a somewhat homogeneous whole the diverse materials of plant, animal, and human biology, to illustrate the great ideas of the science of life. The wide experience of the authors has also enabled them to choose judiciously from the great mass of available material those parts most suitable for classroom use. Aside from its pedagogical suitability, the leading motive actuating the choice of material is indicated in the term *applied* and defined by the authors as aiming "(1) to call attention to the most important facts and principles to be learned by a study of selected animals and plants and then (2) to show how biological science applies to everyday life."

The relative amount of attention given to the different fields of biology may be indicated by noting that some 200 pages are denoted more especially to plants, 185 pages to animals, slightly more than 100 to human biology, and 60 pages to introduction, general discussions, and a brief summary of some of the more important facts relating to classification and problems of heredity. Throughout all these phases of the subject, the physiological viewpoint is made relatively prominent.

The material in the chapters devoted to plants seems to have been well chosen. Beginning with seed plants the various organs are successively considered, enough morphology being included to make the functions and the relations of the organs to their environment intelligible. An occasional statement may not be entirely in accord with the views of many botanists, such for example as terming gymnosperms "seed plants without true flowers," but on the whole the treatment is broad and accurate. A generous amount of attention is given to pathogenic fungi and bacteria, nor are the beneficial micro-organisms neglected.

The reviewer does not feel competent to criticize the treatment of animal biology, but it appears to be fully equal to that accorded to plant life, while in the chapters devoted more particularly to man it is pleasing to note the emphasis placed upon matters of personal and public hygiene. The discussion of the effects of stimulants and narcotics is at once the most scientific and most reasonable that has appeared in any textbook intended for the use of high-school pupils, although it is to be expected that its moderate tone will meet with criticism from the extremists in the ranks of the temperance party.

The *Teachers' Manual* contains in concise form a very large amount of the most valuable material. In addition to more explicit directions for many of the experiments and demonstrations, as well as explanations as to how the desired results may most readily be obtained, there is much information as to what equipment is necessary and where equipment and supplies may be obtained.

The publication of the manual a year after the appearance of the textbook has enabled the authors to make a few needed corrections in the text of the latter. They have also taken advantage of this opportunity to explain some of their reasons for the selections of subject-matter, and to defend the position

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they have taken on various questions discussed in the text, but by far the most valuable feature of the book, which alone is worth many times its price to any teacher of biology, is the very complete and fully annotated bibliography, brought down to date, and including all the more important bulletins that the teacher may obtain free of cost. With the manual at hand there can be little excuse for any teacher not having a valuable biological reference library at a trifling cost.

GEORGE D. FULLER

UNIVERSITY OF CHICAGO

Plane and Solid Geometry. By C. A. HART and DANIEL D. FELDMAN. New York: American Book Co., 1912. Pp. viii +488. $1.25.

This text, while it follows the traditional order and method of development of the subject, has a number of distinctive features. To those teachers who are looking for another book of this type the present volume should make a strong appeal. Among the prominent features is an arrangement in parallel columns of the steps in the proofs of theorems and their reasons. "This arrangement gives a definite model for proving exercises, renders the careless omission of the reasons in a demonstration impossible, leads to accurate thinking, and greatly lightens the labor of reading papers."

Most of the proofs of theorems are given in full. Some of the easier theorems are left for the pupil to prove, especially in the solid geometry. Yet those who believe strongly in the suggestive method of treatment of theorems must look elsewhere.

The collection and arrangement of abstract exercises of the usual types is good. But to those teachers who are interested in the attempt to vitalise geometry by teaching it in relation to its practical uses in the world's work, the applied problems in this new text will prove a disappointment.

The proofs of the "incommensurable cases" of theorems, which an increasing number of teachers think a waste of the time of the average boy or girl, are given. The trigonometric functions and their application to the measurement of distances are not introduced in connection with similar triangles, as in many of the newer texts and as recommended by associations of teachers of mathematics.

The many historical notes give interest to the subject. The drawings are well executed.

Complete Business Arithmetic. By GEORGE H. VAN TUYL. New York: American Book Co., 1911. Pp. 416.

Teachers of commercial classes will welcome this text. Emphasis is placed upon developing facility and accuracy in handling the fundamental operations. The aim is the mastery of fundamental principles rather than of set rules in the solution of problems. The problem material has informational value. Many of the problems are taken from the business affairs of corporations, cities, states,

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and nations of the world. Many calculation tables are illustrated and applied to the solution of problems. The book gives an accurate and adequate view of business as it is actually carried on today. For this reason the text would make a valuable reference book for all teachers of arithmetic and also for business men.

First Year Algebra. By WEBSTER WELLS and WALTER W. HART. Boston: D. C. Heath & Co., 1912. Pp. vi+325.

This text follows the modern tendency to make the solution of equations and problems the core of the course in elementary algebra. Each topic that is taken up is used in the solution of equations, a feature that is to be commended because it makes the mechanical work more purposeful and makes it function better than under the old plan.

New ideas in grouping, similar to those carried out in most of the new texts on elementary algebra, have been executed in this book. Thus, only the easier cases in factoring are given at first; the treatment of radicals and imaginaries is simplified.

One might wish that the present text, in many ways admirable, contained a greater variety and larger collection of good real applied problems that demonstrate the intrinsic worth of the subject to the pupil. The very large number of the old-time problems about A's and B's ages and problems about A and B doing a piece of work in so many days can be of only doubtful interest or value to the pupil. Also, the so-called "informational" problems, of which the book contains a large number, have been severely criticized in recent times as being totally unreal and as giving erroneous ideas as to how the world's work is actually carried on. Such a problem is: "The total population of Chicago, Philadelphia, and Greater New York (1910 Census), was 8,501,174. The population of Chicago exceeded the population of Philadelphia by 626,275; the population of New York exceeded twice the population of Chicago by 396,317. Find the population of each of the cities." No one would attempt in real life to get the answers to this problem by algebra, but would consult a table of statistics. The answers had to be known before the problem was made.

J. F. MILLIS

FRANCIS W. PARKER SCHOOL
CHICAGO

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BOOKS RECEIVED

EDUCATION AND PHILOSOPHY

Clarahan, Mamie M. An Experimental Study of Methods of Teaching High School German. (The University of Missouri Bulletin, Educational Series, Vol. I, No. 6.) Columbia: University of Missouri, 1913. Pp. 32.

Fry, Emma Sheridan. Educational Dramatics: A Handbook on the Educational Player Method. New York: Moffat, Yard & Co., 1913. Pp. ix+69. $0.50.

Hartwell, Ernest C. The Teaching of History. (Riverside Educational Monographs, edited by Henry Suzzallo.) Boston: Houghton Mifflin Co., 1913. Pp. viii+71. $0.35.

Morsch, Hans. Das höhere Lehramt in Deutschland und Oesterreich: Ergänzungsband zur zweiten Auflage 1910: Die amtliche Stellung der Oberlehrer in Deutschland und Oesterreich nach der neuesten Dienstanweisungen nebst sonstigen Ergänzungen enthaltend. Leipzig: Teubner, 1913. Pp. iv+99. M. 3.60.

Myers, Philip Van Ness. History as Past Ethics: An Introduction to the History of Morals. Boston: Ginn & Co., 1913. Pp. xii+387. $1.50.

Thorndike, Edward L. An Introduction to the Theory of Mental and Social Measurements. (Second ed., revised and enlarged.) New York: Teachers College, Columbia University, 1913. Pp. xi+277. $2.50.

United States Bureau of Education Bulletin, 1913, No. 12 (Whole Number 519). The Promotion of Peace. Compiled by Fannie Fern Andrews. Washington: Government Printing Office. Pp. 66.

Wentscher, Else. Grundzüge der Ethik mit besonderer Berücksichtigung der pädagogischen Probleme. (Aus Natur und Geisteswelt, 397. Bändchen.) Leipzig: Teubner, 1913. Pp. iv+116. M. 1.25.

ENGLISH

Alshouse, H. S., and Root, Minnie R. A Brief English Grammar. New York: A. S. Barnes Co., 1913. Pp. 46. $0.25.

Baker, Franklin T., and Thorndike, Ashley H. Everyday English: Book Two. New York: Macmillan, 1913. Pp. xv+336. Illustrated. $0.60.

Curry, S. S. Spoken English: A Method of Improving Speech and Reading by Studying Voice Conditions and Modulations in Union with Their Causes in Thinking and Feeling. Boston: Expression Co., 1913. Pp. 320.

Hastings, William T. (Ed.). The Life and Strange Surprising Adventures of Robinson Crusoe. By Daniel Defoe. Chicago: Scott, Foresman & Co., 1913. Pp. 383.

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Hitchcock, Alfred M. Rhetoric and the Study of Literature. New York: Henry Holt & Co., 1913. Pp. vi+410. $1.00.

Opdycke, John Baker. Composition Planning. New York: D. Appleton & Co., 1913. Pp. xii+334.

Rhodes, Charles Elbert (Ed.). Poe's Raven, Longfellow's Courtship of Miles Standish, Whittier's Snowbound. New York: A. S. Barnes Co., 1913. Pp. 166.

Thomas, Charles Swain (Ed.). Selected Lyrics from Dryden, Collins, Gray, Cowper, and Burns. With Introductions and Notes. Pp. vi+90. Selected Lyrics from Wordsworth, Keats, and Shelley. With Introductions and Notes. Pp. vi+130. Boston: Houghton Mifflin Co., 1913. Each volume, $0.25.

LATIN, SPANISH, AND GERMAN

Boezinger, Bruno. Mündliche und schriftliche Übungen: Ein Elementarbuch für den deutschen Aufsatzunterricht nach der direkten Methode. New York: Henry Holt & Co., 1913. Pp. vi+138.

Ingraham, E. S. A Brief Spanish Grammar, Based on "A Brief Spanish Grammar" by A. Hjalmar Edgren. Boston: D. C. Heath & Co., 1913. Pp. xiv+194. $1.10.

Mosher, W. E., and Jenney, Florence G. Deutsches Lern- und Lesebuch. Boston: D. C. Heath & Co., 1913. Pp. xxii+361. Illustrated. $1.25.

Scott, Harry F., and Van Tuyl, Charles H. A Cicero Composition Book. Chicago: Scott, Foresman & Co., 1913. Pp. 106.

Smith, Barry C. Elements of Latin. Boston: D. C. Heath & Co., 1913. Pp. xi+352. Illustrated.

SCIENCE AND MATHEMATICS

Klein, Joseph J. Elements of Accounting: Theory and Practice. New York: D. Appleton & Co., 1913. Pp. xiv+422.

Miller, H. W. Descriptive Geometry. Peoria, Illinois: The Manual Arts Press, 1913. Pp. 149. Illustrated. $1.50.

Miller, H. W. Mechanical Drafting. Peoria, Illinois: The Manual Arts Press. Pp. 219. Illustrated. $1.50.

Millikan, Robert Andrews, and Gale, Henry Gordon. A First Course in Physics. (Revised ed.) Boston: Ginn & Co., 1913. Pp. x+442. Illustrated. $1.25.

Sargent, Frederick Leroy. Plants and Their Uses: An Introduction to Botany. New York: Henry Holt & Co., 1913. Pp. xi+610. With numerous illustrations. $1.25.

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CURRENT EDUCATIONAL LITERATURE IN THE PERIODICALS[1]

IRENE WARREN[2]
Librarian, School of Education, University of Chicago

Arnold, Felix. Politics, efficiency, and retardation. Psychol. Clinic 7:35–38. (Ap. '13.)

Art schools for girls. Lit. D. 46:1010–11. (3 My. '13.)

Atkinson, Eleanor. Lincoln's alma mater. Harper 126:942–47. (My. '13.)

Ayres, Leonard P. Psychological tests in vocational guidance. J. of Educa. Psychol. 4:232–37. (Ap. '13.)

A brief summary of what has been done and of the prospects of future work.

Baldwin, Bird T. The boy of high school age. Relig. Educa. 8:23–32. (Ap. '13).

The type of religious and moral training suited to the adolescent boy.

Blankenburg, Rudolph. The municipal need of technically trained men. II. Sci. Am. 108:342–43. (12 Ap. '13.)

Blount, Alma. Normal school training for the teaching of English in elementary schools. English J. 2:215–20. (Ap. '13.)

Bredvold, Louis L. Suggestions for reconstruction in high school English. Educa. 33:492–98. (Ap. '13.)

Brown, F. C. Scholarship and the state. Pop. Sci. Mo. 82:510–15. (My. '13.)

Brown, Horace G. Dramatization in history teaching. El. School T. 13:425–33. (My. '13.)

A classification of different sorts of dramatization with their uses, and an outline for dramatic illustration of early American history.

Calfee, Marguerite. College freshman and four general intelligence tests. J. of Educa. Psychol. 4:223–31. (Ap. '13.)

Low correlations were found between college grades and card-sorting, card-dealing, alphabet-sorting, and the minor test.

[1] *Abbreviations.*—Educa., Education; El. School T., Elementary School Teacher; English J., English Journal; J. of Educa. (Bost.), Journal of Education (Boston); J. of Educa. Psychol., Journal of Educational Psychology; Lit. D., Literary Digest; Pop. Sci. Mo., Popular Science Monthly; Psychol. Clinic, Psychological Clinic; Relig. Educa., Religious Education; School R., School Review; Sci. Am., Scientific American.

[2] Annotations by Dr. Frank N. Freeman.

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Clancy, George C. The weak student in freshman English composition. English J. 2:235–40. (Ap. '13.)

Colvin, Stephen S. The practical results of recent studies in educational psychology. School R. 21:307–22. (My. '13.)

Cox, John Harrington. Preparation for teaching college English. English J. 2:207–14. (Ap. '13.)

Dearborn, Walter F. The practical results of recent studies in educational statistics. School R. 21:297–306. (My. '13.)

(The) decline of book-reading. Lit. D. 46:829–30. (12 Ap. '13.)

Fargo, Lucile F. The place of the library in high school education. Educa. 33:473–77. (Ap. '13.)

Foster, William T. The college president. Science 37:653–58. (2 My. '13.)

Gayler, G. W. Vocational training as a preventive of crime. Psychol. Clinic 7:39–46. (Ap. '13.)

A general plea for vocational training.

Heck, W. H. A second study of mental fatigue in relation to the daily school program. Psychol. Clinic 7:29–34. (Ap. '13.)

Finds slight amount of decrease in efficiency in afternoon as measured by arithmetic tests.

Hendrick, Burton J. Six thousand girls at school. McClure 41:46–57. (My. '13.)

Hilton, Henry H. Cost of textbooks per pupil. J. of Educa. (Bost.) 77:369. (3 Ap. '13.)

Immodest college advertising. Lit. D. 46:950. (26 Ap. '13.)

Jones, H. Bedford. The personal influence of the teacher. Educa. 33:499–502. (Ap. '13.)

Lakenan, Mary E. The whole and part methods of memorizing poetry and prose. J. of Educa. Psychol. 4:189–98. (Ap. '13.)

A retrial of the two methods of memorizing resulting to the advantage of the whole method.

Lewis, E. E. Practice teaching in model schools. El. School T. 13:434–44. (My. '13.)

A statistical study of the organization of practice teaching.

Maurer, Elizabeth King. The school and the advertiser. Craftsman 24:84–85. (Ap. '13.)

Moore, Ernest C. Improvement in educational practice. School R. 21:323–33. (My. '13.)

Neglected educational material. Lit. D. 46:1004. (3 My. '13.)

Pedersen, Victor Cox. Sex hygiene in the public schools. Good Housekeeping 56:532–34. (Ap. '13.)

Rapeer, Louis W. The secondary school teachers of Prussia. Educa. 33:478–87. (Ap. '13.)

Richardson, Charles F. The problem of waste in the college lecture. School R. 21:334–43. (My. '13.)

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Riordon, Raymond. A new idea in state schools that will build up character and body as well as brain: a suggestion for California. Craftsman 24:52–60. (Ap. '13.)

Scott, Jonathan French. The decline of the English apprenticeship system. El. School T. 13:445–54. (My. '13.)

The continuation of the discussion in a previous article.

Shaer, I. Special classes for bright children in an English elementary school. J. of Educa. Psychol. 4:209–22. (Ap. '13.)

A system of flexible promotion.

Shull, Charles A. Recent legislation affecting educational institutions in Kansas. Science 37:622–24. (25 Ap. '13.)

Discusses the law consolidating the educational administration of the state.

Stevens, Ellen Yale. The Montessori movement. McClure 41:182–86. (My. '13.)

Terman, Lewis M., and Hocking, Adeline. The sleep of school children, its distribution according to age, and its relation to physical and mental efficiency. J. of Educa. Psychol. 4:199–208. (Ap. '13.)

Discusses low correlations which were found between amount of sleep and intelligence, school success and nervous traits.

Thomas, C. E. English for industrial pupils. English J. 2:241–46. (Ap. '13.)

Todd, Helen M. Why children work. McClure 40:68–79. (Ap. '13.)

Children's confessions to a factory inspector.

Wetzel, William A. The old and new systems of education, a contrast. Educa. 33:503–12. (Ap. '13.)

Wilson, Jessie Woodrow. What girls can do for girls. Good Housekeeping 56:437–45. (Ap. '13.)

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THE SCHOOL REVIEW
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ECONOMY IN EDUCATION[1]

HARRY PRATT JUDSON
University of Chicago

The object of our meeting this evening is to confer together about some possible wastes, I understand, in our organization and methods. Of course in one sense there is no waste in keeping all our boys and girls with good teachers as long as we can. Yet after all we have to bear in mind the supposition that at the end we are trying to give these boys and girls a training for life, and the schooling should have therefore a definite sequence, a beginning, certainly, but also an end. What I wish to discuss briefly is not the many details that you have considered or will consider, bearing on different phases of the subject, but rather some general aspects of it, and if you will allow me, I want to take a look backward from the present and see where we are as a result of our greater elaboration and organization. I shall refer frequently to one phase of education because that illustrates what I have in mind, that is, education in medicine. Of course it is possible for young men, and young women too, if they wish, to go into medical schools without very much preliminary training, but it is very undesirable. The entire tendency is to give in the college the preliminary training, which should precede a thorough medical course, and to bring

[1] Read at the meeting of the Educational Conference with Secondary Schools, Chicago, April 18, 1913. In the September, 1912, number of the *School Review* appears an article by President Judson on "Waste in Educational Curricula."

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into the medical profession, therefore, not simply half-educated boys, but well-trained young men, and then to supplement the course in the medical school by a year or two years of interne work in a hospital. Then, and not till then, is the young man ready for practice.

The highly specialized work of our present society requires specialized training, which consists not simply in the many things a man ought to know, but also in the preparation of the mind. And so we are eliminating gradually the ineffective medical schools. A medical friend informs me that there have been in the last year or two, something over forty medical schools that have disappeared, for the benefit of the entire country—not only for the medical profession, but for all of us on whom the medical profession practice—and I am told there are certain others that might disappear without injuring the profession. The profession is trying steadily to advance in the best possible way. But here we are confronted with this difficulty: as things are, if a young man enters on his medical studies without having had the preliminary training, he is lacking in what is considered an essential preparation for entering upon his professional work; if, on the other hand, he takes the full college course before he takes the medical training, two things result: (1), he takes his medical work when his mind and his hands are somewhat stiffened, because he is not so young as he might be to begin these studies; and (2) by the time he gets through the interneship in the hospital, he is twenty-seven or twenty-eight years old, so that he enters on his life-work older by far than ought to be the case.

I am going to ask to be permitted to call attention to some data under this head given a year or two ago at a meeting of the Council of Medical Education of the United States. The President of that Council called attention to certain facts: that medical candidates at the Western Reserve University for 1912 had an average age of 27.9 years; at Harvard, 27.2 years; at Rush Medical College, which is affiliated with the University of Chicago, 27 years; at the University of California, 27; at Johns Hopkins University, 26.4; and at Cornell University, 26.4. At Johns Hopkins and Harvard and Western Reserve the four years' medical course calls for a four-year college preparatory course; students must have been nineteen

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or twenty when they entered college. At Rush Medical College, the total course, including the college course, is six years. A medical candidate must have been fully twenty, and a little more on the average where men have been financially unable to enter upon their medical course as soon as they have finished the high school. After the six or eight years of college work and medical study, the student begins to practice his profession, and perhaps you can guess how long it will take him to establish himself so that he can live and perhaps help someone else to live at the same time. In other words the young man is past thirty before he is established in his profession.

I have here a table printed in a publication recently issued by the United States Bureau of Education, entitled *Present Standards of Higher Education in the United States*, showing that the end of the medical course preceding the hospital work, in France, on the average finds a young man at the age of 23; in Germany, at the age of 23; in Great Britain, at the age of 23; in the Netherlands, at the age of 24; in Switzerland, at the age of 23, and in the United States in the best schools, the most advanced schools in the country, at the age of 26. That is the ideal, the theoretical, age, and means a practical age of upward of twenty-seven. That means, so far as medical education is concerned, that we have spent a great amount of time of course in preliminary work, a part in the elementary school, a part in the high school, and a part in college, before a young man enters upon his medical course. It seems to me that somewhere in that long course there are years of preparatory work that could be condensed or eliminated. I believe that we can say that at least a year of the elementary school can be eliminated. I feel sure that we do not need more than seven years—I am stretching a point to concede seven years—for elementary-school work. And when I turn to the college, I am confronted by the fact that our American colleges are unlike anything else in the civilized world. In this particular case I think the fact that we are different is not a thing of which to be proud. We are doing university work in the last two college years, and secondary-school work in the first two college years. I repeat, our colleges are doing secondary-school work. Historically the reasons for this are obvious. The origin

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of our colleges goes back to imitation of the English colleges at Oxford and Cambridge. Partly, again, a century ago secondary schools were not developed very highly, therefore very little was required of a student who went to college and we have kept on as we started. When we once do a thing in educational lines, educational inertia causes us to keep on doing it. Hence today we are doing in colleges secondary-school work which is no longer necessary, because we have developed a great body of secondary schools which a century ago were unknown. I can remember distinctly my own admission to college—it was not so many years ago; we had to have a certain amount of Latin, a certain amount of Greek—no more Latin and no more Greek than is required of the Freshman class in most of our colleges today. We also had to have mathematics—we had to know something about arithmetic, and something about algebra through quadratics, and something about plane geometry. We were supposed to know something about the English language, and we mostly did not. That is all. All that of course could be acquired by a schoolboy who plodded along for two or three years. Now we have filled out a secondary-school course that takes four years. We mean something when we require a knowledge of the English language today. We have put in a great mass of scientific work—real science work. I remember I had to teach physics when I came out of college and went to teach in a high school. They were teaching it out of a book, with no experiments, no laboratory. They learned everything out of the book. I was told I was not teaching it the right way. When I asked why, I found the preceding teacher had taught the pupils to memorize the text and emphasize a little more the italicized parts, and still more the parts in small caps. You know what is being done now, the elaborate laboratories—the experiments that our boys and girls are making in physics laboratories, and in chemistry. Chemistry in those days was seldom known in high schools.

What do I mean by secondary-school work? It is hard to define, and yet I think it is fairly easy to define the difference between secondary-school work on the one hand, and college work on the other hand. Secondary-school work is work which is elementary. Take it in French—you begin French and you teach a couple

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of years of French that belong to the secondary school. There is no earthly reason why this should be taught in the college. The same is true of German. I don't believe these subjects ought to be taught in the college. We are teaching history to Freshmen—a very useful thing, no doubt. But it is done in the high schools, and may be done quite as well as in college. The thing easily sums up to a quarter or a third of college work which is essentially secondary-school work. It seems to me that this is one point of weakness in our combined systems.

I have just touched on these things in a general way, because I believe we are keeping our boys and girls too long in school before going on to the real business of life, whether that is professional work, or whether it is business. It is our business as teachers, it seems to me, to put our heads together and find out whether this is true, and find out how we can better accomplish the purposes we have in mind, and that can only be done by teachers working together, because one of our troubles is that the course throughout is not consecutive. I have found so many times that the college teachers say, "Why certainly we must teach these things because they are not taught properly in the high school." And high-school teachers say, "We must teach this and that because they are not taught properly in the elementary school." Now I suspect that condition does not come from defective teaching, but that it is human nature in a teacher to feel that any teaching not his own is not thorough. To organize education aright, it should not be done in a fragmentary way, and therefore we all belong together in meeting the plans which I believe ought to be formed and carried out for the elimination of needless repetition in our secondary school and colleges. I would put less time on the beginnings of our education, and more time on the endings of our education.

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QUALIFICATIONS, SALARY, AND TENURE OF THE TEACHERS IN THE COMMISSIONED HIGH SCHOOLS OF INDIANA

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Superintendents and boards of education are discussing the problem of securing better-prepared teachers for their high schools. High-school teachers, on the other hand, are discussing the problem of securing better salaries. It would be interesting to know just what are the qualifications of our high-school teachers, what are their salaries, and what is the relation between their salaries and the various factors in their preparation. To answer these questions for the state of Indiana has been the purpose of this study.

MATERIAL AND METHOD

For data, the writer first turned to the office of the state superintendent of public instruction. There he was met with every courtesy and the spirit of co-operation; however, there were no data in the office from which these questions could be answered.

A questionnaire was then planned and sent to every superintendent in the state who had supervision over a commissioned high school. This questionnaire was sent out during the third week of December, 1911.

All superintendents received a copy of the questionnaire and the returns came from all parts of the state and from towns of all sizes. This probably gives a random selection.

The following outline shows the headings under which the data were reported:

1. Sex
2. Annual salary
3. Subjects taught
4. Periods per day
5. Periods per week
6. Years of experience
   (1) In present position
   (2) As superintendent

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(3) As principal of high school
(4) As supervisor
(5) As teacher in high school
(6) As principal of graded building
(7) As grade teacher in town or city
(8) As teacher in country district school

7. Age when began teaching
8. Scholastic preparation
   (1) Name of high school
      a) Months attended
   (2) Name of normal school
      a) Dates attended
      b) Degree
      c) When received
   (3) Name of college
      a) Dates attended
      b) Degree
      c) When received
   (4) Name of university
      a) Dates attended
      b) Degree
      c) When received
9. Number of months devoted to the study of:
   (1) History of education
   (2) School administration
   (3) Philosophy of education
   (4) School organization
   (5) Secondary education
   (6) Educational psychology
   (7) Elementary pedagogy
   (8) Special method
   (9) Practice teaching

Reports were received from one hundred and sixty schools. The towns from which the reports were received were classified on the basis of population as follows:[1]

Group	Population	Number of Towns
A	500 or less	35
B	501 to 1,000	47
C	1,001 to 2,500	47
D	2,501 to 5,000	11
E	5,001 to 10,000	9
F	10,001 to 25,000	8
G	Over 50,000	3

[1] It should be remembered that, all through this study, the groups of towns are designated by their letter names.

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These data were supplemented by thirty reports to the inspector for the North Central Association of Colleges and Secondary Schools, containing data on salaries, scholastic preparation, number of years in present position, and total teaching experience. Of these thirty reports, seven were from towns in group "D," eleven from towns in group "E," nine from towns in group "F," and three from towns in group "G." It is likely that the central tendency of the conditions in the towns which reported is a little higher than in the towns which did not report. However, this can be only a matter of opinion and no allowance has been made for it.

RESULTS

Professional training of high-school teachers.—As explained in the introduction, the professional training was reported in months spent in the study of each of the following: history of education, school administration, philosophy of education, school organization, secondary education, educational psychology,[1] elementary pedagogy, special method, and practice teaching.

We shall consider (1) the professional training of all high-school teachers in each of the six groups of towns regardless of the subjects taught, and (2) the professional training of the teachers of the various subjects and combinations of subjects regardless of the size of the towns.[2]

Table I shows the amounts of professional training and the percentages with no professional training in the various groups of towns.

TABLE I

Groups of Cities on Basis of Population	Number of Cases	Professional Training in Months			Percentage with No Professional Training
		Median	25 Percentile	75 Percentile	
A.....	29	6	0	12	41
B.....	44	6	0	18	45
C.....	86	7	0	21	45
D.....	39	12	6	32	13
E.....	69	11	5	22	18
F.....	95	16	6	26	16

[1] The amount reported indicates that general psychology was also included under this heading.

[2] The data from the cities in group "G" were reported in such an irregular way that they could not be used.

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Notice that towns with populations of 2,500 or less require only half as much professional training of their high-school teachers as the towns over 2,500.

It is interesting to note in Table II the percentages of the whole number of teachers, in each of the groups of towns, who teach one subject, two subjects, and three subjects respectively.

TABLE II

Groups of Towns on Basis of Population	Number of Cases	Percentage Teaching One Subject	Percentage Teaching Two Subjects	Percentage Teaching Three Subjects
A	26	12	77	11
B	39	13	62	25
C	78	30	60	10
D	35	83	14	3
E*	72	78	20	2
F	83	83	14	3

*One teacher in this group teaches four subjects: English, history, Latin, and mathematics.

Notice that in the towns of population of 1,000 or less, but 12 per cent of the teachers teach only one subject, while in towns with populations from 1,001 to 2,500, 30 per cent of the teachers teach only one subject, and in towns with populations over 2,500, 80 per cent of the teachers teach only one subject.

Table III shows the professional training of all high-school teachers irrespective of the size of the towns but classified on the basis of the subjects which they teach.

Notice that nine is the median for those that teach only English, those who teach only history, those who teach only Latin, and also those who teach only German. Eleven is the median for those who teach only science, and thirteen is the median for those who teach only mathematics. In other words, the science teachers have nearly 25 per cent and the mathematics teachers have nearly 50 per cent more professional training than the teachers of English, history, Latin, or German.

Generally for the combinations of subjects, the number of cases are so small that the results are not reliable.

General scholarship of high-school teachers.—For want of a better way, general scholarship has been measured in terms of degrees received from the various types of higher schools.

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TABLE III

Subjects Taught	Professional Training of High-School Teachers				Percentage with No Professional Training
	Number of Cases	Median	25 Percentile	25 Percentile	
English	37	9	0	19	39
English, Latin	21	15	0	23	33
English, history	21	12	0	21	29
English, German	11	0	0	11	55
English, mathematics	3	0	0	11	67
English, science	2	27	27	27	0
English, Latin, history	3	9	0	11	33
English, Latin, German	1	9	9	9	0
English, history, mathematics	2	4	0	9	50
English, history, German	3	21	0	35	33
English, mathematics, science	1	0	0	0	100
English, German, drawing	1	12	12	12	0
English, manual training	1	27	27	27	0
English, history, science	2	3	0	6	50
English, music, drawing	2	3	0	6	50
English, domestic science	1	0	0	0	100
English, Latin, mathematics, history	1	0	0	0	100
History	21	9	3	21	24
History, Latin	4	3	0	19	50
History, German	1	0	0	0	100
History, science	6	6	0	27	50
History, mathematics	4	9	3	12	25
History, music	2	31	30	33	0
History, manual training	1	0	0	0	100
History, Latin, domestic science	1	27	27	27	0
History, science, mathematics	3	19	18	33	0
History, science, German	1	0	0	0	100
History, science, manual training	1	6	6	6	0
History, Eighth Grade	1	0	0	0	100
Mathematics	31	13	6	27	13
Mathematics, science	17	9	0	24	35
Mathematics, grades	1	3	3	3	0
Mathematics, Latin	3	0	0	20	66
Mathematics, domestic science	1	3	3	3	0
Mathematics, German	1	6	6	6	0
Science	27	11	0	18	37
Science, Latin	1	27	27	27	0
Science, Latin, music	1	18	18	18	0
Science, Latin, drawing	1	21	21	21	0
Latin	23	9	0	21	26
Latin, German	5	11	7	13	0
Latin, German, drawing	1	0	0	0	100
Latin, music, drawing	1	27	27	27	0
German	9	9	3	15	22
German, music	2	6	0	12	50
German, drawing	1	18	18	18	0
German, French	1	36	36	36	0

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TABLE III—*Continued*

Subjects Taught	Professional Training of High-School Teachers				Percentage with No Professional Training
	Number of Cases	Median	25 Percentile	75 Percentile	
Drawing	1	12	12	12	0
Drawing, domestic science	1	36	36	36	0
Music	4	0	0	6	75
Commercial	8	4	0	12	37
Manual training	2	13	0	27	50
Domestic science	3	24	23	28	0

It was found impossible to make a satisfactory classification of these higher schools in which our secondary teachers were trained. Certain questions at once came up: What is a university in this country? What is a secondary school? What is a college? What is a normal school? These questions are likely to seem easy to the person who has never stopped to think about them. Anyone but a biologist knows the difference between plants and animals, while the latter would hesitate to commit himself on that point. For our purpose, these higher schools were divided into the following three classes: (1) normal schools; (2) private and sectarian schools and secondary colleges; (3) universities. The Indiana State Normal School is the only institution which falls in the first group.

Tables IV and V show the schools included in the second and third groups, and the number of teachers in each group of towns reporting degrees from each school.

Note that, in Table IV, the five leading schools come in the following order: (1) DePauw; (2) Earlham; (3) Valparaiso; (4) Butler; (5) Franklin.

Notice that among the universities, Indiana heads the list with more than half of the total number.

Many teachers who reported degrees from universities also reported degrees from the schools of the other two groups; however, the tables do not show this. The highest degree is taken as the measure of general scholarship.

Table VI shows the general scholarship of the high-school

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teachers in each of the seven groups of towns, irrespective of the subjects taught.

TABLE IV

PRIVATE AND SECONDARY SCHOOLS AND SECONDARY COLLEGES

SCHOOLS AND COLLEGES	GROUPS OF TOWNS ON BASIS OF POPULATION							
	A	B	C	D	E	F	G	Totals
Depauw	3	2	8	5	8	8	12	46
Western College	1	1	.....	.....	.....	3	.....	5
Butler	2	.....	.....	.....	3	1	7	13
Oberlin	.....	.....	1	.....	2	3	3	9
Danville	1	2	1	.....	.....	.....	.....	4
Illinois Wesleyan	.....	1	.....	.....	.....	2	.....	3
Angola	.....	1	.....	.....	.....	.....	1	2
Valparaiso	.....	.....	4	4	2	2	4	16
Colorado College	.....	.....	1	.....	.....	.....	.....	1
Earlham	.....	.....	6	6	1	.....	4	17
Franklin	.....	.....	3	.....	3	1	5	12
Wooster	.....	.....	1	.....	.....	7	....	8
Carthage	.....	.....	1	.....	.....	.....	1	2
Beloit	.....	.....	1	.....	.....	.....	1	2
Radcliffe	.....	.....	1	.....	.....	1	3	5
Marion	.....	.....	1	.....	.....	.....	.....	1
Hanover	.....	.....	.....	.....	5	1	.....	6
Campbell	.....	.....	1	.....	.....	.....	.....	1
Wilmington	.....	.....	1	.....	.....	.....	.....	1
Wabash	.....	.....	.....	2	2	1	1	6
Gilford, N.C.	.....	.....	.....	1	.....	.....	.....	1
Lombard	.....	.....	.....	1	.....	.....	.....	1
Kalamazoo	.....	.....	.....	1	.....	.....	1	2
Ohio Wesleyan	.....	.....	.....	1	2	3	3	9
Holyoke, Mass	.....	.....	.....	1	.....	.....	.....	1
James Millikan	.....	.....	.....	.....	1	.....	.....	1
Syracuse	.....	.....	.....	.....	1	.....	.....	1
Vassar	.....	.....	.....	.....	2	1	.....	3
Olivet, Mich	.....	.....	.....	.....	1	2	3	6
Manchester	.....	.....	.....	.....	1	.....	.....	1
Galva, Ill	.....	.....	.....	.....	.....	1	.....	1
Royal	.....	.....	.....	.....	.....	1	....	1
Marietta	.....	.....	.....	.....	.....	1	.....	1
Adrian, Mich	.....	.....	.....	.....	.....	1	.....	1
Defiance, Ohio	.....	.....	.....	.....	.....	1	.....	1
Augustania	.....	.....	.....	.....	.....	1	.....	1
Western, Kentucky	.....	.....	.....	.....	.....	.....	1	1
Hope College	.....	.....	.....	.....	.....	.....	1	1
Emerson	.....	.....	.....	.....	.....	.....	1	1
Queens College	.....	.....	.....	.....	.....	.....	1	1
Wellesley	.....	.....	.....	.....	.....	.....	1	1
Denison	.....	.....	.....	.....	.....	.....	1	1
Drake College	.....	.....	.....	.....	.....	.....	1	1
Conn. Wesleyan	.....	.....	.....	.....	.....	.....	1	1
Lafayette College	.....	.....	.....	.....	.....	.....	1	1
Belmont	.....	.....	.....	.....	.....	.....	1	1

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TABLE V

Universities	Groups of Towns on Basis of Population							
	A	B	C	D	E	F	G	Totals
Indiana	2	3	13	23	42	36	39	158
Michigan	.....	1	.....	3	3	8	16	31
Purdue	.....	.....	2	.....	.....	8	10	20
Northwestern	.....	.....	1	.....	1	3	1	6
Cornell	.....	.....	1	.....	.....	17	2	20
Chicago	.....	.....	1	4	9	1	26	41
Kansas	.....	.....	1	.....	.....	.....	.....	1
Columbia	.....	.....	.....	1	.....	2	1	4
Ohio State	.....	.....	.....	2	.....	.....	1	3
Illinois	.....	.....	.....	.....	3	3	4	10
Minnesota	.....	.....	.....	.....	.....	1	3	4
Wisconsin	.....	.....	.....	.....	.....	3	3	6
Missouri	.....	.....	.....	.....	.....	1	.....	1
Michigan Agricultural	.....	.....	.....	.....	.....	1	.....	1
Leland Stanford Junior	.....	.....	.....	.....	.....	.....	1	1
Harvard	.....	.....	.....	.....	.....	.....	2	2

TABLE VI

The General Scholarship of High-School Teachers in Terms of the Number Who Have Degrees

Groups of Cities on Basis of Population	Number of Cases	None	Normal	Private and Sectarian Schools and Secondary Colleges	Universities
A	29	20	.....	7	2
B	44	31	2	7	4
C	86	33	3	31	19
D	83	24	4	22	33
E	145	48	5	34	58
F	181	51	4	42	84
G	289	120	1	59	190

TABLE VII

Percentages of Those Who Have Degrees

Groups of Cities on Basis of Population	Number of Cases	None	Normal	Private and Sectarian Schools and Secondary Colleges	Universities
A	29	69	.....	24	7
B	44	70	5	15	9
C	86	37	3	37	22
D	83	29	5	26	40
E	145	33	3	23	40
F	181	28	2	23	45
G	289	41	0.3	20	34

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Table VII is the same as Table VI in terms of percentages.

Notice that up to a population of 25,000 there is a definite correlation between the size of the town and the amount of general scholarship required of the high-school teachers. In towns of over 1,000, over 50 per cent of the high-school teachers have some kind of a degree, and in towns over 2,500 about 40 per cent have a university degree.

Table VIII shows the general scholarship of the teachers of the various subjects, irrespective of the size of the towns.

TABLE VIII

Subjects Taught	Number of Cases	Percentage with No Degree	Percentage with Normal Degree	Percentage with Private or Sectarian or Secondary College Degree	Percentage with University Degree
English	139	24	2	20	54
English, Latin	24	25	.....	37.5	37.5
English, history	28	54	3	21.5	21.5
English, German	11	18	.....	46	36
English, mathematics	5	20	.....	60	20
English, science	2	.....	.....	100	.....
English, Latin, history	3	33	.....	67	.....
English, mathematics, history	2	50	.....	50	.....
English, Latin, German	2	100	.....	.....	.....
English, history, German	3	33	.....	.....	.....
History	60	28	.....	20	52
Mathematics	92	30	1	16	53
Mathematics, science	24	46	4	21	29
Science	82	25	7	21	47
Latin	66	14	.....	27	59
Latin, German	12	25	.....	33	42
German	55	38	2	16	44
Drawing	25	80	.....	4	16
Music	12	83	.....	17	.....
Commercial	30	63	.....	23	14
Manual training	33	67	.....	9	24
Domestic science	25	8	.....	.....	12

Notice the narrow range in the amount of scholarship of the teachers who teach only one subject. Notice also that the central tendency of the scholarship of these "one-subject" teachers is distinctly higher than that of all of the other teachers in any groups of towns shown in Table VII.

In most instances, the number of teachers teaching a combination of subjects is so small that the results are unreliable. Many of these have been omitted from the table.

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Tenure of position of high-school teachers.—The tenure of position of high-school teachers is measured by the number of years in their present position. Table IX shows the percentages of these in their present position for the first year and the central tendency of the tenure of each group of towns.

TABLE IX

PERCENTAGE IN PRESENT POSITION FOR THE FIRST YEAR, AND CENTRAL TENDENCY OF TENURE

Groups of Cities on Basis of Population	Number of Cases	Percentage in Present Position One Year	Median	25 Percentile	75 Percentile
A	29	55	1	1	2
B	44	59	1	1	1
C	86	52	1	1	2
D	83	51	1	1	2
E	145	41	2	1	4
F	181	33	2	1	4
G	289	18	5	2	9

Notice that the tenure of position of our high-school teachers doubles at two points. The breaks are made at the populations of 5,000 and 50,000 respectively.

Total teaching experience of high-school teachers.—Here are considered the types of experience irrespective of amounts and the total amounts of experience irrespective of type.

TABLE X

TYPES OF EXPERIENCE IRRESPECTIVE OF AMOUNTS

	GROUPS OF TOWNS ON BASIS OF POPULATION					
	A	B	C	D	E	F
Number of Cases	29	44	86	39	81	95
As superintendent	0	7	3	3	5	6
As principal of high school	7	7	9	36	11	21
As supervisor	7	9	5	3	4	4
As teacher in high school	83	80	74	95	94	90
As principal of graded building	7	0	3	8	6	10
As grade teacher in town or city	24	30	30	36	38	25
As teacher in country district school	31	39	35	51	27	35

Table X shows the types of experience irrespective of amounts. The figures in the body of this table indicate the percentages of

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the whole number of teachers in a given group of towns who have had a given type of experience.

Table XI shows the amounts of experience irrespective of type.

TABLE XI

AMOUNT OF EXPERIENCE IN YEARS

Groups of Cities on Basis of Population	Number of Cases	Percentage without Previous Experience	Median	25 Percentile	75 Percentile
A	29	24	2.5	1.6	6
B	44	16	4	2	9.5
C	86	27	2.6	1.5	5.7
D	84	7	5.5	2.7	8.5
E	145	16	5.7	2.8	10.5
F	178	12	6.7	3.8	11.6
G	236	4.6	9.4	5.3	15.4

Notice that the teachers in the larger towns have had much more experience than the teachers in the smaller towns.

TABLE XII

SALARIES OF HIGH-SCHOOL TEACHERS AND DENSITY OF POPULATION

	Groups of Towns						
	A	B	C	C	E	F	G
Number of cases	26	41	78	73	97	165	193
Salaries—							
$ 500–$ 599	14	18	24	3	.....	1	1
600– 699	12	17	37	18	10	12	2
700– 799	2	6	13	34	27	33	8
800– 899	.....	.....	4	15	27	45	23
900– 999	.....	.....	.....	2	13	39	27
1,000– 1,099	.....	.....	.....	1	6	16	53
1,100– 1,199	.....	.....	.....	.....	3	8	22
1,200– 1,299	.....	.....	.....	.....	.....	6	25
1,300– 1,399	.....	.....	.....	.....	.....	4	12
1,400– 1,499	.....	.....	.....	.....	.....	.....	1
1,500– 1,599	.....	.....	.....	.....	.....	1	11
1,600– 1,699	.....	.....	.....	.....	.....	.....	3
1,700– 1,799	.....	.....	.....	.....	.....	.....	1
1,800– 1,899	.....	.....	.....	.....	1	.....	3
1,900– 2,000	.....	.....	.....	.....	.....	.....	.....
2,000	.....	.....	.....	.....	.....	.....	1
Median	$599.50	$614.50	$640.50	$745.00	$805.55	$880.30	$1,067.00
25 percentile	550.00	555.50	580.00	682.00	787.80	784.00	950.00
75 percentile	658.00	675.00	692.25	799.00	895.00	915.60	1,246.00

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The salaries of high-school teachers.—Here is considered the salaries of our high-school teachers by correlating their salaries with each of the following: (1) density of population; (2) professional training; (3) general scholarship; (4) tenure of position; (5) total teaching experience; (6) the subjects taught.

Table XII shows the correlation of the salaries of our high-school teachers to the density of population.

Table XIII shows the correlation between the salaries of our high-school teachers and their professional training.

TABLE XIII

Professional Training in Months	Number of Cases	Median Salary	25 Percentile	75 Percentile
0	96	676	606	910
3	13	775	656	987
6	22	671	591	950
9	29	681	590	815
12	27	731	615	816
15	13	750	662	837
18	19	759	636	875
21	26	725	650	812
24	11	780	691	831
27	17	682	636	769
30	12	799	599	1,199
33	14	825	716	950
36	10	840	680	890
39	4	799	699	899
42	2	850	825	875
45	3	850	775	1,025
48	2	1,199	650	1,550
51	.....	.....	.....	.....
54	4	899	599	1,199

Table XIV shows the correlation between the salaries of our high-school teachers and their general scholarship. The figures in the body of the table indicate the percentage of the whole salary group who have no degree, or a degree from a given type of schools.

Table XV shows the correlation between the salaries of our high-school teachers and their tenure of position.

Table XVI shows the correlation between the salaries of our high-school teachers and their total teaching experience.

Table XVII shows the correlation between the salaries of our high-school teachers and the subjects taught.

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TABLE XIV

SALARIES OF HIGH-SCHOOL TEACHERS AND THEIR GENERAL SCHOLARSHIP

SALARIES	NUMBER OF CASES	PERCENTAGE WITH NO DEGREES	DEGREES		
			Percentage with Normal-School Diploma	Percentage with Degrees from Private and Sectarian Schools and Secondary Colleges	Percentage with University Degree
$ 500–$ 599	58	60.3	1.7	25.8	12.1
600– 699	107	45.8	2.8	26.1	25.2
700– 799	134	35.0	1.5	26.1	37.3
800– 899	110	24.5	1.8	29.1	44.5
900– 999	81	34.5	.....	14.8	50.6
1,000– 1,099	74	40.5	.....	13.5	46.0
1,100– 1,199	34	41.2	5.9	11.7	41.2
1,200– 1,299	30	30.0	.....	10.0	60.0
1,300– 1,399	17	17.6	.....	17.6	64.7
1,400– 1,499	1	.....	.....	.....	100.0
1,500– 1,599	12	16.6	.....	8.3	75.0
1,600– 1,699	3	.....	.....	63.6	33.3
1,700– 1,799	1	.....	.....	.....	100.0
1,800– 1,899	4	25.0	.....	.....	75.0
1,900– 1,999	.....	.....	.....	.....	.....
2,000	1	100.0	.....	.....	.....

TABLE XV

NUMBER OF YEARS IN PRESENT POSITION	NUMBER OF CASES	SALARIES		
		Median	25 Percentile	75 Percentile
1	242	$ 748	$ 632	$ 875
2	127	770	668	950
3	69	833	753	1,045
4	55	870	750	995
5	36	980	837	1,200
6	20	899	775	1,100
7	16	999	840	1,080
8	15	950	825	1,240
9	13	925	787	987
10	8	966	799	1,100
11	2	750	725	775
12	7	1,116	1,075	1,142
13	12	1,212	975	1,281
14	8	1,250	1,099	1,300
15	5	1,025	825	1,088
16	1	850	825	875
17	5	1,050	999	1,200
18	1	750	725	775
19	2	1,100	950	1,250
20	7	975	875	1,162
21	3	1,083	1,041	1,175

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TABLE XVI

Total Teaching Experience in Years	Number of Cases	Salaries		
		Median	25 Percentile	75 Percentile
1	76	$ 670	$ 576	$ 794
2	38	676	618	875
3	48	750	690	830
4	58	775	700	885
5	44	899	688	970
6	49	787	678	910
7	32	825	699	970
8	36	899	766	1,042
9	15	926	762	995
10	20	900	700	1,000
11	14	933	816	1,050
12	24	900	720	1,100
13	11	1,050	888	1,225
14	16	925	800	1,100
15	11	1,062	975	1,525
16	5	775	712	1,038
17	9	850	785	975
18	7	825	738	1,025
19	6	900	825	1,050
20	7	925	738	1,025
21	9	988	938	1,088
22	12	900	800	1,100
23	5	950	825	1,075
24	4	850	800	900
25	3	1,050	1,025	1,075
26	5	850	725	1,175
27	1	1,150	1,125	1,175
28	3	775	738	1,038
29	.....	.....	.....	.....
30	3	1,125	975	1,138

TABLE XVII

Subjects Taught	Number of Cases	Salaries		
		Median	25 Percentile	75 Percentile
English	96	$844	$736	$1,035
History	45	921	800	1,050
Mathematics	63	945	820	1,115
Science	65	946	800	1,115
Latin	51	861	750	995
German	40	881	788	1,025
Commercial	23	878	795	1,050
English, Latin	20	664	628	800
English, history	22	660	569	735
English, German	10	583	545	725
Mathematics, science	21	730	650	875

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A few subjects and many combinations of subjects are not included in this table. They are left out because the number of cases were so small that the results were not reliable.

CONCLUSIONS

1. There is a high correlation between the salaries of our high-school teachers and both the density of population and their general scholarship.

2. There is a low correlation between the salaries of our high-school teachers and their professional training, their tenure of position, and their total teaching experience.

3. The science teachers, the mathematics teachers, and the history teachers receive the highest salaries, in the above order.

4. The teachers of combinations of subjects receive much lower salaries than the "one-subject" teachers.

GENERAL CONCLUSIONS

The following general conclusions are drawn in answer to the questions raised at the outset of this study:

1. The annual salaries range from $500 to $2,000.

2. The amount of professional training ranges from none to several years of professional work.

3. The general scholarship ranges from no degrees at all to one or more years of postgraduate work in our best universities.

4. The tenure of position ranges from one year to a working lifetime.

5. The teaching experience ranges from one year to a life's work.

6. In all of this great range the best-prepared teachers are the ones who receive the highest salaries.

7. Boards of education can secure any kind of teachers they wish if they demand the preparation and are willing to pay the price. And within the given range, high-school teachers can secure any salary they wish if they are willing to make the preparation.

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THE USE OF SCIENTIFIC MATERIAL IN THE HIGH-SCHOOL COURSE IN ENGLISH[1]

H. O. CHURCH
Principal of the J. Sterling Morton High School, Cicero, Illinois

About a year and a half ago the suggestion arose in a meeting of high-school principals of northeastern Illinois that the content of the study books used in the high-school course in English was somewhat limited. The belief was expressed that the curriculum would be improved if the literature studied in one class included four fields of literature rather than one. It was suggested that we have a year devoted to the study of poetry and belles-lettres, a second year to the study of scientific material, and a third year to historical material. The English teachers of the J. Sterling Morton High School felt that, if this plan were followed precisely, the pupils would be surfeited during the first year with one, and during the next year with another, kind of material, as they now are throughout each of the four years in most high schools.

Hence, a modification of the original suggestion was worked out by our English teachers. Our high-school year, like that of many other high schools, is divided into two semesters. The study books of our former English course were one or two for each semester, and all of them from that class of literature which may be called artistic writing, or, as many term it, literature. This you all recognize as the usual quantity in the English dietary in high schools. The first change that we made was to increase the number of classics studied from one to two a semester to four for each semester. In the second place, instead of devoting the study to one field, according to the ukase of the college-entrance list, we planned to cover four fields of literature, viz., fiction, history, science, and poetry and belles-lettres.

[1] Read in the English Section of the Educational Conference with Secondary Schools, Chicago, April 18, 1913.

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Our list of study books now is as follows:

FIRST YEAR

FIRST SEMESTER

FICTION
Dickens, *Nicholas Nickleby*
Dickens, *Dombey and Son*

HISTORY
Franklin, *Autobiography*
Bryant, *Ulysses*

POETRY
Arnold, *Sohrab and Rustum*
Bryant, *Selections*

SCIENCE
Burroughs, *Birds and Bees*
Burroughs, *Sharp Eyes and Other Papers*

SECOND SEMESTER

FICTION
Dickens, *Old Curiosity Shop*
Scott, *Ivanhoe*

HISTORY
Parkman, *Oregon Trail*
Irving, *Alhambra*

POETRY
Lowell, *Vision of Sir Launfal*
Browning, *Selections*

SCIENCE
Burroughs, *Squirrels and Other Fur-Bearers*
Burroughs, *Afoot and Afloat*

SECOND YEAR

FIRST SEMESTER

FICTION
Blackmore, *Lorna Doone*
Hawthorne, *House of Seven Gables*

HISTORY
Parkman, *Conspiracy of Pontiac*
Prescott, *Conquest of Mexico*

POETRY
Shakespeare, *As You Like It*
Shakespeare, *Twelfth Night*

SCIENCE
Higginson, *Three Out Door Papers*
Lyell, *Travels in America*

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SECOND SEMESTER

FICTION
Scott, *The Talisman*
Scott, *Quentin Durward*

HISTORY
Lincoln-(Tarbell), *Speeches and Writings*
Brown, *Epoch Making Papers in United States History*

POETRY
Shakespeare, *Julius Caesar*
Shakespeare, *Henry V*

SCIENCE
Tyndall, *Glaciers of the Alps*
Burroughs, *A Bunch of Herbs and Other Papers*

THIRD YEAR

FIRST SEMESTER

FICTION
Eliot, *Silas Marner*
Thackeray, *Henry Esmond*

HISTORY
Fiske, *Critical Period of American History*
Motley, *Peter the Great*

POETRY
Tennyson, *Idylls of the King*
Shakespeare, *Macbeth*

SCIENCE
Darwin, *Voyage of the Beagle*
Thoreau, *Katahdin and Chesuncook*

SECOND SEMESTER

SCIENCE
Huxley, *Lay Sermons.* L. 25
Darwin, *Earth Worms.* R. 25

POETRY
Milton, *Minor Poems.* R. 15
Milton, *Paradise Lost.* R. 15

HISTORY
Macauley, *Warren Hastings.* Me. 12
Macauley, *Chatham.* 9. 15

ESSAY
Ruskin, *Sesame and Lilies.* R. 15
Thoreau, *Walden.* L. 25

FICTION
Hugo, *Ninety Three.* B. 45
Dickens, *A Tale of Two Cities.* L. 25

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The study books of the fourth year are omitted from this list because the year's work is planned to be as far as possible a duplication of the course in the history of English literature, which is usually given the first year in college. All pupils who are preparing for college are excused, as a rule, from the fourth-year work in English. Because of the press of the college-entrance requirements in the other departments, it is not usually advisable for a pupil who is preparing for college to take more than three years of English. All pupils who are not looking forward to a college course are required to take fourth-year English work. In this course, however, since it is our effort to make it a replica of the English course in college, there are inevitably no science books.

It will be noted that there are, in this course of three years, twelve titles from that field of literature called science. Many of these works are short; some of them have been used, perhaps, by teachers in the grades.

The first great benefit that comes from the injection of such books into the course is that the English teachers find that there is literature other than poetry and belles-lettres; the second that he must not only read but study in new fields and thus he will be broadened. The pupil at once finds that there are new points of contact in literature. Before, literature always meant to him poetry or some other fine writing which had little to do with the material of the world. Now he makes the acquaintance of some very interesting material. Thus interest is quickened in the world about him, and he is thus more interested in his English work.

A very significant fact in regard to this change is that the pupils like it and do the work with much enthusiasm. High-school pupils are alert for anything which appeals to them as practical. Every English teacher has discussed the English course with the pupils —especially with the boy who "hates English," abhors theme-writing, and sees no use in the study of poetry and the so-called classics. And every teacher has found himself somewhat baffled in his efforts to convince this boy that his English work is worth while. In many cases he hears incorrect English in the home from the father who stands for everything worth while in his opinion. Perhaps the father is inclined to think that we are wasting time when we devote many days to a book of which he has not heard.

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The tastes of many of our young people have not been trained so that they appreciate the great things in literature; poetry is a sealed book to them.

It is far from our purpose to step down to the level of these boys and girls, or to lower our standards in the slightest degree. But it is our purpose to broaden our course—to place it beyond the criticism that we are narrow and inclined to draw close, hard lines excluding the great field of subjects which attract the practical young person. The argument that appeals to the pupil is that which shows how his English work is going to be of use to him. To tell him that what he needs when he gets out into the world is the ability to *talk*—to talk on many subjects, to be able to say what he has to say in clear concise English, to answer questions intelligently, to give directions briefly, to meet any situation with poise and readiness—this appeals to him in the light of a possession having a financial value. In this day of vocational interest, the work in English must point to a definite aim with a real value.

And that is what a broad range of books read in the English class accomplishes. The classics alone which have made up the entire course seem to the pupil to be an arbitrary selection from one field—a barring of much that is good and useful simply because it is not found in a certain list of selected books. Is there nothing of modern everyday interest that can be read? Are the interesting books in other fields—scientific, industrial, social, and commercial —not a part of English? When the wide-awake boy or girl is led to read rapidly and to discuss what he reads freely he feels that he is doing something quite worth while. This was recently illustrated in a class that was reading Professor Tyndall's *Glaciers of the Alps*. The assignments were planned to cover sixty minutes of continued reading, with a small allowance for necessary reference to the dictionary but none for detailed work. The pupils were asked to note pages where there were good descriptions, figures of speech, or anything which they noticed during the one reading of the book. In this reading the boys and girls responded with a remarkably keen appreciation of Professor Tyndall's work, calling attention to vivid word pictures and getting real enjoyment from the account.

For the teacher, this change means a great deal. He must

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be awake and alert for new fields. He will find himself broadening in his thinking, and instead of being limited to the classics of the old days, he will plunge into new material. As English is used in every other department of the school, so will the scope of the other departments become a field of investigation of the English room.

Not only scientific and industrial material, but reading along all lines is used, so that the scope of home reading and the class study covers a wide territory—modern science, modern drama, books on social conditions, political economy, biography of men and women successful in various fields of the world's activities of present-day interest.

Class reports from the *Survey*, reviews of the Peace Foundation, investigations of industrial conditions in Chicago, and then in more remote fields—all these awaken an interest in the world of today and develop a spontaneous easy use of the English language. Each member of a third-year class was recently given a copy of the Peace Foundation and two days were devoted to reviews of the articles. Each pupil stood before the class and spoke with only such notes as could be written on one side of a four by five card. The result was interesting in several ways, in the use of the English language, the spontaneity of expression, the class interest, and the questions which followed the report. Such use is made of all available material. The value of such work is unquestionable. The difficulty lies in the fact that material is not available. Books which would serve the purpose are not published in editions which are within our reach financially. When the pupils are required to purchase at least eight books and sometimes more each year, inexpensive books must be secured. It is a deplorable fact that we are handicapped in our work because of the lack of such editions. However, we have much that is within our reach. The director of the Thomas Hughes Reading Room of the Chicago Public Library has been untiring in her efforts to help pupils find material for oral and written work.

Every effort is made to prepare the pupils to rely on their own resources. They are accustomed to conduct the class, draw out points of interest by questioning each other. The object is to reduce the amount of talking done by the teacher to a minimum and to give the boys and girls the best that we can in preparation for life.

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COLLEGE ENTRANCE AND ADVANCED CREDITS FOR MANUAL ARTS[1]

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There is considered in this discussion only one class of students in the high school, namely, those who elect manual-arts courses in the high school and who leave the high school to enter college work, not including engineering.

It should be understood, then, that whatever is said regarding the kind of manual arts suitable for high schools and the consideration to be given such work by colleges has reference to a very small percentage of the possible shopwork and drawing which may be, and is done, in the high school.

Furthermore, it must be understood that the number of pupils taking manual arts in the high school, and who may be taken into account in this theme, is only a very small part of the total number who elect high-school manual arts of one form or another and at some time during their high-school course.

I am a firm believer in high-school manual arts both for the individual who will use it for college-entrance purposes (and, so far as we are concerned, gets out of it only general educational value) and for the one who elects it in high school as a major subject for the benefit it will be to him in a vocational way. For the last-mentioned type of individual manual arts to my mind is of greater value, as compared with other school subjects, than it is to the individual of the first-mentioned type.

The boy who continues his school education into and possibly through the non-technical college will get out of high-school manual arts, as out of other high-school studies, a general educational value. On the other hand, the boy who completes his school education in the high school, whether or not he completes four years

[1] A paper read before the Manual Arts Section, High School Conference, University of Chicago, April, 1913.

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of full high-school work, will get out of manual arts this same educational value and a vocational value as well. As an asset this second value for him is greater than the first because his range of life's activities are more nearly limited to the industrial occupations than the range for the boy who secures a college education.

Especially will this be true if the school administrative officer discriminates between these two individuals and fits the manual-arts work to the needs of each. Emphasizing as he should the vocational value of manual arts for the boy who completes his school work in high school, he will permit this boy both to specialize and to concentrate upon manual arts, whereas he will allow neither of these privileges to the boy who will go to college.

Assuming now that this should and will be a method followed, we can determine at once the kind of manual arts which should be given in the high school. We may classify under two heads: (1) with respect to the number of subjects and (2) with respect to the intensity and application of each subject.

Under the first classification it is proposed that for the boy who completes his school work in the high school as well as for the one who does so in college the greatest possible number of subjects be open for election. The purpose of this, however, is different for the two boys. For the first it is to give an opportunity of choice. For the second it is to give an opportunity for variety of information and practice.

Under the second classification, the intensity and application of each subject, it is proposed that the boy limited to a high-school education be permitted to choose only one, or at best only a few subjects, and that he pursue them as special lines of work. He will do this with one subject only if practice in it in high school is to serve as the basis for his future occupation.

It will be readily seen that I believe in manual arts for vocational ends for at least a certain class of high-school students. I would hasten the day when all of our large high schools that can provide the equipment and the teaching force will throw their doors open to the special student who wishes to get what he can of industrial and all forms of vocational work for occupational ends. When this day comes the privilege of election must be offered in the early

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high-school years as well as the later ones, otherwise the special student will not look to the high school for a life-preparation.

For the boy who is to have a college education my proposition is very different. For him the manual arts have an educational value principally. I should therefore eliminate from his course through the high school all specialized courses in manual arts which would be elected by the first-named boy. I should likewise have him take such subjects for a shorter period of time. The application would be general, therefore, and the intensity slight for the future college student as compared with the boy whose high-school work is designed to fit him for work outside of the school.

It will be concluded from this statement that the future college student's high-school manual-arts work will be general in character. Another conclusion should be reached also: that it should be specific as well. By this is meant that whatever is done must be standard in terms of commercial and educational practice, both in content and in method. He will do well whatever he undertakes and he will do it in the best possible way.

Having determined the kind of manual arts for the particular high-school students under consideration at this time, we may now at least speculate with respect to the values of such work and thus lay the foundation for determining credits to be offered by colleges.

It is assumed that manual arts which fulfil the conditions set forth above, good when tested by both educational and commercial standards, will be recognized by most if not all educators as having value which should be recognized in terms of credit. The question of classifying the value and of estimating it in terms of credit both in the high school and in college is quite another issue. However, an attempt to do this may pave the way toward a mutual understanding and a consequent compromise. For the purpose of better considering the question of credit, a statement regarding some of these values is given below. They are given under two heads—technical and general.

Under the head of technical, I suggest: (1) Co-ordination of hand, eye, and mind to make for precision in any class of work which will call upon any *one* or *all* of these members in the solution of a problem; (2) A development of self-confidence which will develop

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initiative especially in the solution of problems which requires trained hand and eye; (3) A scientific and consequently an analytical turn of mind. The handling of problems in the concrete, which may be solved in more than one way to get a result, tends toward the analytical thought process; (4) Industrial intelligence and training. Perhaps the most specifically technical result of manual arts is the definite knowledge and skill which an individual acquires and which are necessary tools in a possible future vocation.

The general values will naturally be the result of certain individual or combined technical values and there will be fewer of them. There are listed only two, viz., (1) General information regarding materials, tools, and processes and their application in life's activities, particularly those which we term industrial; (2) A development of the faculties of judgment and reason in scientific subjects. As between judgment and reason on one side and memory on the other, the manual arts will develop the former while the academic studies (especially those which do not require motor activity, such as the languages and pure sciences, for example) will develop more particularly the memory.

It is doubtless true that some high-school subjects bring returns which cannot be credited at all to manual arts. It may also be true that the manual arts yield only a small measure of certain general benefits which other high-school subjects are said to give in large measure. But it is doubtful if any one high-school subject tends to develop an individual in as many directions and, in the aggregate, so extensively as do the manual arts.

For this reason we wish to grant them due and proper credit. What shall it be? Entrance college credit, advanced college credit, or both? Let us consider for a moment each question.

First as to entrance credit. If our position has been fairly taken up to the present point there can be no tenable ground upon which to argue against entrance credit. The question then must be, How much entrance credit?

It has been argued in the past by some people that, as a new subject, comparatively speaking, and, in justice to the older and traditional high-school subjects, manual arts must first prove their worth before asking for credit proportional to that given the older

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subjects. Somehow I begin to feel that we have reached the time when, in our best-organized departments, which by no means are necessarily in the largest high schools, we can say: The test has been made. If this is true, then we should ask for what we believe we deserve.

This is what was done in Wisconsin two years ago with the result that the state university now grants up to and including four credits for approved high-school vocational work of which manual arts is one of four. A unit is granted upon the basis of one school year of thirty-six weeks in which manual arts are taught five double periods each week. In other words in this respect it is placed upon the same basis as the sciences. In granting this credit Wisconsin has practically conformed to the recommendation of the Western Drawing and Manual Training Association and to that of the North Central Association of Colleges, as well. Five credits for entrance are given by the University of Chicago for vocational subjects.

Someone may say that such a grant will develop the subjects of manual arts too rapidly in the high schools and consequently the quality of work will be lowered. To such I would say: Let the quality standard be kept up by a properly conducted inspection and censorship on the part of those who make the grant.

Another says: Such a liberal grant will draw back into the high school such work as may be done in the college before the high school is ready for it. I doubt this. In the first place let us remember that a very little of this work is done in any college except by engineering students with whom we are not now concerned. Again, the college, so far as my observation goes, is rather jealous of its possessions and anxious to advance its own standard of work as soon as the high school will do, sufficiently well, the work which the college is now forced to do. Is this not true in the languages and mathematics?

I feel that the manual arts must be dealt with by the college on the same basis as any other high-school subject. If it is worthy of credit at all give it all it deserves after it has been properly inspected as to both qualitative and quantitative elements. The maximum credit therefore may be four units if 360 school hours

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are required for a unit of credit and if the high schools give five 90-minute periods per week to manual arts. Most of them do. I believe the recommendation of the North Central Association of Colleges is 240 hours for one credit. Three hundred and sixty double periods equal 270 hours, hence the suggestion which I make is a perfectly fair one.

Now when we consider the question of advanced credit in the college for high-school manual arts we shall probably agree that if it is to be given it must be on the ground of its being equivalent to a certain amount of similar work done in the college. This is the basis I believe upon which advanced credit is given in other subjects.

This being true, we are limited, except in the case of colleges maintaining manual-arts departments, to the engineering college with which this discussion does not deal.

If I may digress just for a moment, however, to consider this case, I would make the suggestion that advanced credit granted by engineering colleges for some high-school manual arts seems to me to be perfectly legitimate. In the case of some engineering colleges, at least, the type of the work done in the Freshman shops and drawing-rooms is not very different from, and the standard of execution no higher than, that done in many of the best high schools.

For some time past it has seemed to me that the prevailing custom of the engineering college to grant advanced credit on the basis of twice as much work done in the high school as in the college is an imposition, unless it is evident that the work done in the college is of a very different standard from that done in the high school. To my mind the reverse condition is often true, for the high school often does as good work and even more of it than does the college. To be justified in maintaining the present relationship the college should demand of its Freshmen a higher standard of excellence in a more advanced type of work than that done in the high school. The situation is the same in the college of liberal arts which maintains a manual-arts department. Certainly it is not fair to students to demand a repetition in college of high-school work.

When the colleges do set a different standard in their manual-arts work than that required in the high school and continue to offer advanced credit, they must demand of high schools who receive

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the advanced credit the equivalent of college work This will tend perhaps to inspire the large high schools to do a higher standard of work, and to discourage the smaller high schools from trying for advanced credit because of their limitations in equipment and other facilities. Both kinds of high schools would thus be benefited by such a discrimination; the one would be tempted to do the thing which it should be able to do in many cases; the other would be content to do more satisfactory entrance-credit work.

I hear someone say that this will not be true, for the human desire to ape will still exist and the smaller as well as the larger high schools will strive for the advanced credit. The overcoming of such a difficulty will be possible when the examiners of the high-school work are representatives both of the high school and of the college; when these examiners would determine the requirements for advanced credit by arbitration based not only upon the time element and upon quality and quantity of work, but also upon the amount of equipment and the purpose back of the work done. It it quite possible that in the college a very different method of approach may be made in both drawing and shopwork than can be possible in a high school.

The conclusion reached, as a natural result of this analysis is:

1. Let the college grant entrance credit for all worthy high-school manual-arts work upon the basis of an investigation of the quality and quantity of high-school work made by a committee made up of both high-school and college men. An equitable adjustment may be made by this means and a full college unit will be given for 360 high-school periods of approved work.

2. Let the college grant advanced credit only to the larger high schools which are equipped for college work and do its equivalent. The granting of such credit should be the result of inspection by the college concerned. It would seem that very much more equitable results would be secured in the matter of college credit for high-school manual-arts work if these suggestions were more uniformly carried out.

But the granting of credit, whether it be entrance or advanced, is a part of the *mechanics* in a college organization. Back of the granting of credit there must be a high-school schedule which will

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not only permit, but even encourage boys and girls to elect the manual arts. The ordinary means provided in a high school for the election of a subject—not one of the traditional favored few—is (1) to create a course with this subject as a center or hub, or (2) to allow the subject to be taken as an additional study.

It would seem to me much more satisfactory to the high-school teacher and to the principal as well to organize all four-year high-school courses about some *central core* made up of required studies such as English, history, and science, and to permit of free election for all other studies. By this plan every four-year high-school student would have the selection of at least *one-fourth* of his studies from year to year. He would be able to transfer from one course to another without serious handicap, as the core for each course would be the same, and he would never be obliged to carry some subject which he particularly desired as an extra.

Such an organization would, first of all, permit students to elect manual arts or other vocational studies. But, as it has been intimated, more than this is necessary if the high-school student is to have a course which is balanced between the academic and vocational work. *Administrative officers must encourage the election of vocational subjects by high-school students who are preparing for college.* This is perfectly feasible both from the standpoint of college requirements and from the standpoint of value to the individual. The average high school schedules sixteen units for graduation; fourteen are required for entrance to college, four of which may be earned in vocational work. Thus there are six high-school units for every prospective college student which may be secured by the election of vocational subjects, at least two or three of which might profitably be manual arts.

The thing which is needed on the part of administrative officers is *vocational guidance* and *encouragement.*

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THE INSTITUTIONAL HIGH SCHOOL AND WHAT IT DOES FOR THE COMMUNITY

R. L. SHORT
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Since the discussion of the red schoolhouse and its evolution into the great public-school system of today, pages upon pages have been written in discussing a wider use of the school plant. Much has been said for and against the academic school, the cosmopolitan school, the high school of commerce, and the technical high school. However, little has been said of the motive part of education or of the institutional side of the great modern school.

In the larger cities the school plants costing hundreds of thousands of dollars for grounds, buildings, and equipment must be held to strict account for definite returns from so large an outlay of money. The questions, "What can the high school do for the boy?" and "What can the high school do for the girl?" mean far more than material preparation, far more than academic or trade education during the allotted hours of the school day. Such institutions ought to be open day and night for the entire year. They should offer not only preparation for life's work from the financial side, but must give training which produces helpful citizens and a healthy community.

In the technical schools it is not difficult to find a motive for education. Motive is a large factor in discipline in schools of this type. The vocational school is easier to discipline than is an academic school, because the physical activity of the child absorbs much of his surplus physical energy. To the physical activity in a manual-training school add the motive in a technical school and you have ideal conditions so far as the teacher is concerned. Although the pupil does not usually specialize when he enters such a school, he has in most cases determined somewhat definitely his career before he is half through his first year.

Yet the problem of administration is a more difficult one. The modern school to produce maximum returns to the taxpayer must

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be an institutional high school. The institutional high school must not only be what is now the function of the best technical schools, but must add to this more of the social and civic center work. Perhaps definite outlines of what is done in a particular school may be of greater interest than general definitions.

The West Technical High School of Cleveland attempts to shape its day courses so that the pupil has as great an earning power as possible whenever he stops school. The contact with the pupil and his home is as close as can well be. Each man teacher is assigned 30 boys from one neighborhood. These boys are *his* so long as they are in school. The teacher visits each home, makes friends with the parents, learns the boys' surroundings and tendencies, and therefore administers knowingly, not blindly. Each pupil at the plant works under the best possible conditions of administration whether it be in his 15 hours of book work, 15 hours of shop, or 3 hours of physical work a week. He works under no rules. He is a citizen and has the freedom as well as the restrictions of a citizen. He has privileges of which his father never dreamed. He has a 6-acre athletic field where he may play. He has at his command tennis courts, basket-ball courts, an outdoor study-hall, an outdoor gymnasium, indoor gymnasiums, shower-rooms, a library, a music-room, a domestic science restaurant.

Nor does his less fortunate brother who works in the daytime have much to regret in these advantages. Instruction in this school goes on continuously from eight-thirty in the morning until nine at night. The boy or girl, man or woman may come from work directly to the school. Here he may keep his clean clothes; a locker and shower-bath both are ready for him. He may exercise in the gymnasium, read in the library, get a wholesome supper at cost in the school café. This café is a part of the domestic science department and is run at cost on scientific, hygienic principles.

At present 65 printers' apprentices and journeymen are released by their employers earlier than the regular closing time. They reach the school at five o'clock, have an hour of printer's art under expert instructors, have half an hour in the gymnasium, then a shower bath and their supper, and are back at work at seven o'clock. This time in the printshop. At eight o'clock they leave

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for home, better for the association which they have had at the school and better prepared for the trade which they follow. This arrangement is open to all trades and is taken advantage of by hundreds of men and women in Cleveland today. The school from three-thirty o'clock until nine is the working-man's college—a college which brings immediate returns to the individual and to the community.

Similar schools of the institutional type will do much toward answering the criticism of waste and expense in the public schools. The old-type school ran five hours a day for a time not exceeding two hundred days. What business investment of half to three-quarters of a million and with ordinary overhead expense could stand but one thousand working hours a year and live? In schools of the institutional type the teacher must forget that class instruction constitutes his day's work. That is only one-half his responsibility. Such schools mean consecration to school work, long hours devoted to the pupils' good, ofttimes repeated visits to a home, a long day. The increased duties are compensated by big educational returns and an increase in salary. These schools do not mean that a teacher is free at two, three, or four o'clock five days a week and all day Saturday. They mean that a teacher is subject to call twenty-four hours a day, seven days a week. The teacher's average time in the school building is nine hours fourteen minutes, daily; moreover, this does not include the time devoted to visits or homes or to outside preparation for class work. To the boy such schools mean better education, larger opportunity, better appreciation of the teacher, a clearer understanding of why school is; to the parent they mean a knowledge of school purpose and discipline, a feeling that the teacher has a personal interest in the individual pupil. In short, such schools mean that the school and the parent must divide educational responsibility. To the community they insure a better citizenship, better workmen, more earning power, improved civic conditions.

Such schools are possible in every community.

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A PLAN FOR OUTSIDE READING[1]

J. A. WALLACE
Crosby High School, Waterbury, Connecticut

Direction of the whole reading of our pupils is becoming more and more desirable, that the necessarily limited and inadequate class work may bear proper fruit. Though a pupil read Shakespeare and Milton in class, it will avail him nothing if his reading outside is vapid and cheap. Few of our pupils come from homes of culture. Their knowledge of, and interest in, good books may be placed at zero. It is the privilege of the teacher to awaken these minds to the beauties of literature. But he cannot do this successfully with simply the means provided by class reading. In fact, it has been my experience that pupils, on account of their peculiar feeling that anything read in class must be looked upon as a task, will get much more of a lasting love for literature from reading done outside, in which they have a larger latitude to choose the time and circumstances under which the reading may be done.

The mere posting of a list of books is the smallest part of a successful plan of outside reading. As everywhere else in teaching, the personality of the teacher must be brought into play, continually directed, not toward driving pupils to read by set requirements, but toward arousing their curiosity and interest so that they will wish to investigate for themselves. To accomplish this there must be a cordial feeling between pupil and teacher.

With these ideas in mind, the English teachers of the Crosby High School, some three years ago, introduced a plan of outside reading which has had all the earmarks of success. Frank talks with pupils outside of school and written opinions from pupils in school have convinced me that in this school, at least, the plan has more than justified itself.

The plan is very simple. At the beginning of the year a list of books is posted at the school and at the city library, from which

[1] Read before the New Hampshire State Teachers' Conference, May, 1912.

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pupils are required to select one book a month. At the end of the month they are given a sheet of paper divided into four longitudinal sections. At the top they write their name and class. At the heads of the four columns are printed "Name of Author," "Title of Book," "Date," and "Remarks." The pupil fills in the spaces each month, recording as many books as he has read, although only one is required. Under "Remarks" he is told that he is expected to write whatever he thinks he would like to say about the book. It is impressed upon him that these remarks are to be purely informal. Cut-and-dried comments are discouraged. The pupil is made to feel that in filling out this sheet he is not doing a school exercise, but is making a record for himself, which he will bind and keep as a guide to later reading. Sometimes a pupil writes a single line under this heading, and sometimes a whole page. How much he shall write, or of what nature it shall be, is left to him to determine. The teacher suggests, however, that, as this is a record which will probably be consulted in later years, it might be well to say whether or not he liked the book, and to give a hint of the plot, that the written record may later recall the book to mind. I wish to emphasize the fact, however, that these are suggestions merely, and the pupil is at perfect liberty to follow them or not as he sees fit. In the opinion of the teachers the requirement of any formally planned remarks would largely nullify the whole system.

As this is a record which the pupil is filling out for himself, it is also impressed upon him that he should put down his honest opinion of the book, and not what he has heard others say of it, or what he thinks the teacher would like to have him say. It is pointed out to him that his opinion may or may not agree with the opinion of others. In the latter case there is room for suspicion, at least, that the trouble is with himself and not with the book. Still, people do have different tastes in reading as well as in everything else, and it may be that this particular book is not of the class which attracts him. Pupils are warned, however, not to condemn a book too hastily. If they have read it in the Freshman year and have not found it to their liking, they are encouraged to try it again in the Junior or Senior year, when their tastes in

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reading are better formed. Many do later try a book which they have very much disliked in an earlier year, and find it quite the most delightful book they have ever read. There is nothing like an experience of this kind to teach a pupil that his standards of judgment are not yet formed, and that he should not be too quick to blame the book for lack of interest. Teachers often relate experiences of their own along the same lines. This does much to rid the pupil of the idea that he is supposed to like every book that is called a classic. Talks of this kind also make the pupil respect the openness and sincerity of the teacher. If a teacher professes to like every book on the list, although the pupil does not say so, in his heart he accuses that teacher of cant. He is right, too.

In fact, the teacher's influence in such a plan is one of the most important features. In our school it is planned to take at least one day a month from the regular work for a book-chat with the class. I used the word "chat" advisedly; there is no cut-and-dried recitation by the pupils or lecture by the teacher. It is a frank and friendly chat between the two. A teacher who has read widely and has a real love for books can exert an unbelievable influence. Here is the place for him to talk frankly of his own experiences in reading books—of his many attempts to read a certain book the first few chapters of which were uninviting, and of his perseverance until he finally reached a chapter where the book began to unfold and became so absorbingly interesting that he could not leave it until he had read to the very last page. Such a personal anecdote will impress on the pupil that he must not lay aside a book because it is not immediately interesting. He must persevere until he has read enough to form an honest opinion. To do less would be unfair to book and author.

In these very informal monthly chats the teacher also answers any questions pupils may care to ask. One of the most difficult questions to answer satisfactorily concerns the modern light novel. Many pupils who find Scott, Dickens, Cooper, and Jane Austen uninspiring become intensely interested in the latest "best seller." Naturally they cannot understand why a book which is anything but interesting should be praised so highly, while another is condemned or passed over in silence. With the boys the question

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of the dime novel will often come up. Ridicule or scornful condemnation, as Arlo Bates has pointed out, is a poor way to meet the difficulty. If you condemn in wholesale terms books which your pupils know are absorbingly interesting to them, you will not make converts; you will simply lessen your hold on your pupils. They will make up their minds that your way of looking at things is so far removed from theirs that it is hopeless to expect you to understand. In the same way you might condemn football, but no healthy boy would eschew football on that account. He would simply wonder at you as a strange sort of creature, and keep right on playing. There is nothing that will lessen your influence more than to have your pupils feel that you are out of sympathy with them and do not look at things as they do. Much tact is needed to show a pupil that one book is a classic and the other is trash. I believe that a frank admission of the good qualities of the modern novel and a fair statement of its shortcomings in a way that will appeal to the pupil's own judgment is the only successful way to deal with this difficult question. Only the exceptionally sympathetic and tactful teacher will be entirely successful in doing this.

All sorts of questions are asked in these chats, and the teacher loses no opportunity to get his pupils interested in a particular book or author. I find little details of the author's life very often helpful. A sketch of the plot, or a recital of some particularly striking incident in the book also helps. Reading a chapter now and then should arouse curiosity and interest. Each teacher will use the means best adapted to himself; but every teacher should realize that upon his own personality rests in a large measure the success of the plan.

The hardest part of a plan like this, to work out with success, is the posted list of books from which pupils are required to select one book a month. At first we tried a very full and elaborate list of several pages, with books on travel, fiction, history, biography, science, etc., included. We hoped that we had provided for all tastes, however eccentric. We had our pains for our work; the pupils chose practically nothing but fiction. Do what we would, we could not get them in any numbers to read travel, biography,

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or history. After a year's experience we frankly recognized the impossibility of driving them, and so lopped off all but fiction from the list. I should like to have my pupils read something other than fiction, but I have given up the attempt. Other teachers may find their experience directly contrary to mine; I can relate only what mine has been. There are teachers who succeed in getting high-school pupils to read for pleasure *Paradise Lost*, *Rasselas*, and even *Prometheus Unbound!* I can only hold up my hands in astonishment. Either these teachers and pupils are of a very unusual kind, such as I have never met in captivity—or the pupils are deceiving themselves and their teachers. It is very easy to be satisfied, and indeed edified, in this matter of outside reading. Every teacher of experience knows, or should know, that pupils have a most accommodating way of liking what they think they are expected to like, especially if their marks are affected thereby. It is easy for a teacher to think he is getting remarkable results, when, in fact, he is getting no results at all. Frank personal talks with his pupils and rigid probing of their opinions are necessary to keep a teacher properly balanced.

Our list, then, is now a fiction list. Last year I restricted it in the Junior class to a very few authors such as Scott, Dickens, Cooper, Holmes, Howells, Jane Austen, Charlotte Brontë, Thackeray, etc. My idea was that a short list would lead pupils to read two or more books by the same author, instead of roaming about the list in a desultory way. I impressed upon them that they could not express any opinion worth while on an author until they had read more than one of his works. I encouraged them to read several books by the same author before they passed on to another author. The reasoning, I think, was sound; but the pupils found the list too much of a restriction. I have enlarged it this year.

I find that pupils in reading fiction have little idea of character-drawing, and practically none of style. Their interest is wholly in the story. If there is a good story, it is a good book, regardless of slovenly style, caricatures rather than characters, or forced situations. They are also interested in the direct rather than in the symbolic story. This makes Hawthorne's books, delightful

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as there are to us, lacking in interest for them. They want a plain, unvarnished tale, and Hawthorne gives them a highly elaborate web of fancy. Mistakes in making up lists of books for such reading occur very often because teachers do not realize that students are young and therefore undeveloped in mind. Many excellent books cannot be read by them at this time. Nor can they be expected to like the same books as their elders. We must carefully pick and choose the books best fitted to their undeveloped state. The others must be left for later years.

At the close of the school year I usually ask my pupils to write on a slip of paper their opinion of the plan. I tell them that I value their honest opinion, be it favorable or unfavorable. I also urge them to make any criticisms and suggestions that occur to them. Some of these criticisms I quote below, transcribing them with all their solecisms and crude constructions. I would say in justice to the pupils that they were written hastily in class. Teachers, I am sure, will more easily believe them genuine than if they were carefully edited beforehand.

Here is one from a girl of rather less than average ability and enthusiasm:

I think this idea of reading a book and bringing in a report every month, is a very good one. I have had two year's experience with this kind of work, and I find that it has helped me to read some good books that I never would have read otherwise. *David Copperfield* for instance. I don't think that I ever read a book that I enjoyed as much as I did this one. I would probably never think of reading this book, if I hadn't seen it on the list that we were to select from.

Here is one from a boy, one of the best in the class, who likes to think for himself:

At first I hardly thought this book business was going to be of any value—it seemed oppressive to think that you *must* read something. That in a way took away the pleasure in reading a book that otherwise would have been throughly enjoyed. But as the year went on, the burdensome part of it was lifted up, and now although some of the books I read are a real struggle, I feel in the end that this idea has been a beneficial thing. For, if I knew that I did not have to read some of these books, I am extremely sure that I would not have gone beyond Chapter 2, or hardly reached that far, and now that I have really read them, I have found that they were good after all.

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This girl sees the value of keeping records for later reading:

I consider a book review as both interesting and beneficial. It is interesting to write your opinion of a story and, perhaps, a short outline of it, and it will certainly be interesting, in later years, to read the accounts you have given and contrast them with your later formed ideas of a book. It is also well, if at present you do not like a book, to re-read it later and see if it makes a better impression on you.

I know I enjoyed reading over the accounts of books I had read in my Freshman year, spending a whole afternoon reading and thinking over what I had written.

The following is from a boy who has a very pronounced bent toward science and mechanical contrivances. His definition of the dime novel I find especially refreshing. He is a very outspoken and manly boy, and to have him assert frankly that he was cured of the dime novel habit is worth a good deal in judging the results of this plan:

The direct object of the experiment failed partly in my case, but another result I think a great deal more important, has come out of it.

In the Freshman year we were compelled to read a good book each month. I did not like it. I was accustomed every week to go to the news-dealer and buy a "dime novel" as they are popularly called, and get myself excited in wonderful escapes, horrible deaths, blood-thirsty villians, clever heroes, and bad English. When I was forced to get a library book, I had to abandon one of my dime novels each month. But I found after I had read two or three library books, that they were made of infinitively better stuff, i.e., better plots, more reasonable characters, and better English. The result was that I stopped reading dime novels. My English is bad as it is, but what would it be if I continued reading trash?

Through this system I also got well acquainted with the ins and outs of a library, and I think that is also something I would not have gotten were it not for the monthly book review.

This girl sees the value in leading to thoughtful reading:

Furthermore, the fact that we are to write a review of the book makes us think about what we have read, so that now, no matter what book I read, I always, after finishing it, sit and think about it, pick it to pieces, etc.

Books lying on the shelves at home for years took on a new interest to this pupil:

I think that the reading of one book a month has been a pleasant and instructive task for me. I have read a few books that I should not otherwise have read; For instance, the *Tale of Two Cities* has been resting on a shelf at

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home since I can remember. It had no pictures and the print was rather small, making the book look forbidding in contrast with the light novels I have been accustomed to reading through in an afternoon. Other girls at school were reading the book and curiosity and a sense of duty made me read it. The result is that I find Dickens' books a pleasure and intend to read more during the summer.

The discussion feature appeals to this one:

I have enjoyed the book a month plan very much this year. Not only has it brought me into contact with several books which I have liked, but it has also made me want to read more and has made me plan some reading for this summer that otherwise I should not do. I think the giving up of a period once in a while to talking about the books that have been read and are about to be read, adds much to the interest of English.

These opinions of pupils will show, I think, what the general feeling of the pupils themselves is toward the plan. Whatever criticism has been made by them is not very deadly. It is concerned with the time taken in reading, and the feeling of compulsion that goes with it. These are shortcomings, but no method is ideal, and this is far from ideal.

We believe that the love of good literature has been very much increased in our school by this plan. It has in many cases undoubtedly developed a desire to read good books in place of poor, and has very much increased the intelligence with which a given book is read. We have strong hopes that the desire for good literature thus awakened is no mere transitory appetite, but will grow during the coming years. This is too much to expect in all cases, but if three or four of our pupils become lovers of literature through our efforts, should we not be satisfied?

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EDUCATIONAL NEWS AND EDITORIAL COMMENT

THE SUPERINTENDENT AND THE BOARD OF EDUCATION

In the two greatest school systems in this country the question of the authority of the superintendent and the question of the relation of the superintendent to the Board of Education has arisen for very emphatic discussion during the past few months. Mrs. Young as superintendent of the Chicago city school system resigned, "for the purpose," as she put it "of maintaining harmony in the administration of Chicago schools." The Board of Education requested her to withdraw her resignation after a protest on the part of many citizens, especially the women of the city. Mrs. Young made it clear during the whole of the discussion that the fundamental question at issue was the question of her ability to carry educational policies through the Board of Education. Some of the members of the Board of Education, on the other hand, were evidently determined to deal directly with such matters as the selection of textbooks. In New York City the symptoms of dissatisfaction on the part of the Board of Education with its sphere of activity appear in somewhat more aggressive form. The president of the Board in a report addressed to that body on July 9 of this year writes as follows:

When you began your work of the present year there was existent in this building a time-honored tradition that a Board of Education should not presume to deal first-hand with education itself, but should be confined to matters of finance, equipment, and perfunctory voting upon measures to be perfected by those whom it was a usage to designate as educational experts. Some years of adherence to this theory had built up a system so unsatisfactory as to result in a compulsory investigation of the schools and in published declaration of their formalism, rigidity, and obsolescence. In a review of the investigators' findings, the head of the commission concluded the service of education in this city to be seriously defective and the Board of Education at not sufficiently close quarters with its work. But several months before the publication of these criticisms you, from your own experience and from your own desire of progress, had anticipated them by co-operative action in taking up, considering, and passing upon vital questions directly concerned not only with sites, buildings, and supplies, but with the actual training of children.

In accordance with this policy you have provided for a special committee to represent you in the preliminary steps leading to the nomination of district superintendents. Your High-School Committee has performed a similar service affecting the nomination of high-school principals. In both of these changes

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you have realized that your responsibility to the city is not fulfilled by a perfunctory vote, but that, as you are held ultimately responsible, your judgment should find the freest exercise in important matters of this kind and early enough in the proceedings to escape embarrassment through desire to avoid personal disparagement of candidates nominated without consulting you.

Both of these cases bring up in very concrete form the general administrative question of the relation of the Board of Education to the conduct of schools. It is the belief of educational people that a city superintendent is the technical officer who is charged with the responsibility of conducting the schools. When the president of the New York Board exemplifies a different theory by saying that the responsibility for the appointment of high-school principals belongs to the Board of Education, he makes a statement that is unacceptable to the superintendents of schools throughout the United States. It is indeed true that the Board of Education will feel the effects of any bad appointments to high-school positions. They undoubtedly will be called upon where the high schools are unsuccessful to see to it that the fundamental organization of the schools is modified, but in general they are more likely to find it expedient to organize the schools through the superintendent than to try to judge of the qualifications of high-school principals directly in their board meetings.

The report of the president of the New York Board is an added evidence of a hostility against the superintendent of schools on the part of certain members of the New York Board which has been no secret for some time. Superintendent Maxwell is, however, able to cope with the situation without being brought to the point of offering the board his resignation.

The schools of either one of these two great cities present unique problems in school organization, and sooner or later there will undoubtedly be a much more generally accepted principle underlying the relations between board and superintendent. In the meantime these cases make it clear that the educational people of the country have it as one of the important obligations to define clearly the relation between the superintendent of schools and the boards of education.

FURTHER STATEMENTS REGARDING THE PROBLEMS CONFRONTING THE SUPERINTENDENT

The Bureau of Education at Washington is performing a very distinct service by sending out certain inquiries to different classes of schools and furnishing to the press of the country the returns on these

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questions. Recently an inquiry was sent to superintendents of cities of from 2,500 to 30,000 population asking them to make a statement of the questions which gave them the greatest difficulty in organizing their schools. Two pages of returns from these inquiries are put into the hands of the editors of journals and newspapers. It is not possible here to enumerate all of the difficulties encountered by these superintendents, but the following list will appeal to those who have charge of schools and serve to set forth very vividly the difficulties encountered by school superintendents in the ordinary routine of this work:

1. How to test the efficiency of teachers. What should be the standard.
2. How to deal with backward and retarded pupils.
3. How to secure competent janitors.
4. How to arouse interest among parents. (This question was asked in nearly all the letters.)
5. How to control mothers' associations.
6. How to prevent individual school-board members from interfering with teaching methods and discipline.
7. How to make and keep teachers progressive in scholarship and professional training. Many superintendents complain of older teachers who have taught for a number of years and appear to be unresponsive to new ideas.
8. How to secure and retain competent teachers and how to prevent the election of incompetent "home teachers" who may be related to some member of the board or to some prominent citizen. Judging from the tone of the letters received, not many superintendents in cities of less than 10,000 population are consulted when teachers are elected. One superintendent writes, "I wonder in how many cities of 30,000 population and less the superintendent is allowed to select his own teachers. In my experience I find boards of education less willing to take the superintendent's recommendation in regard to teachers than in almost any other thing, and I am at a loss to understand why, unless it is a matter so personal to them that they hesitate to follow the recommendations of the superintendent in this respect." Many others write in substance: "Boards are loath to give the superintendent a free hand in selecting teachers. They are prone to consider teaching positions as half perquisites for relatives, a daughter of an old friend or business associate. They also employ 'home teachers' often irrespective of qualifications in preference to competent teachers who live in another city or state." A superintendent writing on the same question, however, says: "I believe that in a majority of instances where nepotism prevails, where personal favoritism influences the board, where politicians name the teachers, the fault is with the superintendent rather than with the board. A tactful and fearless superintendent can secure the co-operation of his board if he will."

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REFERENCES ON VOCATIONS

The Brooklyn Public Library has issued a pamphlet which will be of interest to many teachers. It is a list of books and references on vocational choice, guidance, and training. The list shows such documents on these subjects as are to be found in the Brooklyn Public Library. It can be obtained by sending to the Library, 26 Brevoort Place, Brooklyn, N.Y. Teachers who wish to inform themselves on this subject and teachers who are looking for material to put in the hands of their students will find this list very helpful in directing them to a large body of literature. It is a commonplace in present-day education that the children ought to be informed about possible occupations. Some of the subtitles that are typical and show the range of topics covered in the list are Telephone and Telegraph Operating, Stores or Shops, Retail Merchandise, the Stage, Stenography and Typewriting, School and Philanthropic Work, Railroading, Salesmanship, Nursing, Navigation, Music, Millinery, Library Work, Forest and Lumbering, Flower Growing or Selling, and so on through a long series of occupations which ought to be of interest to school children.

SOCIAL CENTERS

The Russell Sage Foundation issues a pamphlet prepared by Mr. C. A. Perry entitled *How to Start Social Centers*. This pamphlet gives very helpful and explicit advice on the methods of getting people and funds together for the "wider use of schools." For example, one section of the pamphlet is devoted to the discussion of the topic "creating public sentiment," another to "removing legal obstacles." The pamphlet will help teachers or citizens not connected with the school who wish to organize this type of work.

CREDIT SUPERVISED AND UNSUPERVISED

The following item is clipped from the *Topeka Capitol*.

Sunday-school teachers who attend the state normal schools will be given advanced standing for their Sunday-school experience, according to plans announced yesterday by the new board of administration. Credits are to be allowed not only Sunday-school teachers, but also to any who have taken active part in church work that might have a bearing on teaching in the grade school of the state. The plans for this innovation are being worked out by the board.

"The board of administration," said President Ed F. Hackney, "together with Presidents Butcher and Brandenburg and Principal Lewis, the new heads

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of the state normal schools, are working out a plan for giving advance standing in the normal school to those persons who have had teaching experience, supervising experience, experience as teachers in Sunday schools and other church work, and to those who have had experience in other life work that would especially qualify them for the teaching profession."

Evidently the recognition of all possible forms of intellectual activity is becoming very active in Kansas. In the meantime it seems not inappropriate to point out a difference between credit with supervision and credit without supervision. When an institution gives its certificate to an individual, that institution presumably guarantees to the world that the individual in question has performed some worthy intellectual work. This guaranty ought certainly to be based upon some knowledge of the work for which credit is given. Many of the public schools are now recognizing the propriety of supervising the work that is done at home, such as work in music or in some practical activity which is not provided for within the school walls. But in all of the cases where this is done properly there is some effort made to ascertain the quality and value of the work for which credit is given. Doubtless in the enforcement of this new rule in Kansas the same vigorous effort will be made to find out the quality of the work. If the State Normal School can in this wise assume supervisory control over the work of Sunday schools, much will be gained for education. There is danger, on the other hand, that the temptation will be very strong to grant credit for work that has not been properly supervised. If that is done in this or any other institution, the certificates granted by the institution will deteriorate just in proportion to the freedom with which credit is given for work which is not supervised.

AN EDUCATIONAL SURVEY

The *Daily Republican News*, of Hamilton, Ohio, devoted three full pages of its issue of Saturday, June 7, to a thesis entitled "Industrial Education for the City of Hamilton, Ohio," prepared by Mr. Winifred Hugh Brown, a student in the graduate department of education at the University of Wisconsin. The fact that this thesis attracted attention in the city as an important document on which to base the organization of the schools is itself an indication of the general interest which is aroused these days by any careful and systematic examination of the school situation. The thesis itself is a notable contribution to the general literature of school surveys and to the literature of industrial education. Mr. Brown gives some figures which show the efficiency of the schools

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of Hamilton in retaining the children of that city. He then proceeds to outline the industrial condition, comparing the situation in Hamilton with the situation that has been studied in Massachusetts. He gives the classification of the causes why children leave school. He gives a detailed statement of the arguments in favor of industrial education from the point of view of the manufacturers, the labor union, and the interests of the community. He then describes the various lines of work which can by any means be regarded as contributing to industrial education in the city. The whole report is well worthy of imitation and illustrates the possibility in each city of working out in detail on thoroughly scientific methods a statement of the local conditions upon which the organization of the school system must be based.

AN EXPERIMENT IN VOCATIONAL EDUCATION

An experiment in vocational education is to be tried in Louisville, Ky. The Consumers' League of that city has been co-operating with the Board of Education in the effort to open some sort of special training for school children who would otherwise drop out of the school. A member of the League, commenting on the new plan, makes the statement that only 10 per cent of the school children in the city of Louisville go to the high school. For the remaining children of the city it is important that some kind of educational opportunity should be organized. The Consumers' League therefore secured, with the co-operation of the Board of Education, the advice of Professor Leavitt, who visited the city and looked into the commercial and educational conditions and finally recommended the establishment of a special course for children of fourteen years of age. In this class, which is to be under the direction of a special teacher whose salary is paid by the Consumers' League, factory conditions are to be imitated as nearly as possible and articles of commercial value are to be produced for use in the schools. The school opens in the autumn. The teacher who is to have charge of the class has been spending the summer in acquiring some additional experience. She is a teacher of experience in general school work and is now to have charge of this special problem.

Such an experiment is of very general interest at this time when the question is being raised whether the "regular" school organization can manage vocational education. Let private agencies try supporting the school board in a straightforward experiment rather than bring chaos into our already complex school organization by starting experiments without the aid of trained teachers and administrators.

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TOPICS DISCUSSED AT THE MEETING OF THE N.E.A.

The impression which is made on the public mind by a gathering of teachers is quite as important as the impression that is made upon the members of the association itself. The following editorial from the *Tribune* of Salt Lake City gives a summary of what might be called the academic side of the summer meeting of the National Education Association:

The papers read by the teachers were of a high order of merit, and they offered a wide variety of treatment. Some teachers seemed to favor the idea of making the schools more professional than they have been heretofore, allowing the teachers a greater control and independence of the local school boards. A good deal of criticism of boards of education was indulged in, and one would suppose from some of the sentiments expressed that the teachers had on the average a rather poor opinion of boards of education in general, especially when the teachers get away from home. Other speakers, on the contrary, favored not only a full participation of the boards of education in the school work, but of parents, and indeed of the whole community; it being urged that unless the whole public is favorably interested in the school work, that work is likely to languish and to suffer. We think there can be no question that the latter view is the better one to take. At the same time, wide discussion is desirable in all matters of public concern, and so it was good to see these wide variations of opinions frankly and freely expressed.

A decided tendency was noticeable in the addresses as delivered in favor of making the schools more practical, and getting away from the old idea that the grade and the high schools are chiefly serviceable in preparing students for colleges and universities. This is the old school ideal; but a very decided tendency was manifested to get away from it. The new tendency is to introduce new studies, especially to strengthen manual training and to introduce the study of agriculture in the grade schools. The idea appears to be to make each system of school work measurably complete in itself—in the grades, the high schools, the technical schools, the vocational schools; and the colleges and the universities for those who have the time to reach them. Undoubtedly, this reaching out toward the practical idea, to make the schools as immediately serviceable as they can reasonably be made in practical utility, is the direction which the school work is likely to take. There has been in the past too much time given to studies preparatory to advanced grades and theoretical instruction in the higher institutions of learning; the result being that the pupils so instructed were left high and dry between the two ideals. They have been getting too little of a practical nature, and too much of what they will never find use for. We have no doubt that the tendency of the school instruction must tend more and more to the practical and less and less to the theoretical and to preparation for professional life. Those who wish to educate their children thoroughly on the old basis, and have the time and the money to do

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so to the utmost possible extent that the higher-education institutions can provide, will utilize the grade schools and the high schools as steps in the direction sought; but those children who have neither the taste nor the time to pursue finished courses of instruction to the ultimate limits will be given a better start in life from the practical schools as changed. They will be put in touch with their environment and instructed in those things which their daily life will touch; and this unquestionably will be a great improvement over the old methods.

INNOVATIONS IN HIGH SCHOOLS

The following items are selected from the news circulars of the Bureau of Education:

"For first-year pupils only" is the motto of the Parker High School at Dayton, Ohio. The object of this school is to carry boys and girls over the difficult "Freshman" period. Superintendent Painter has recently put into the hands of every eighth-grade pupil in Dayton a booklet describing the purpose and value of a high-school education with special reference to the advantages of the Parker First-Year High School.

A number of the leading business and professional men are giving talks to the high-school students at Shelbyville, Ind., on vocational topics, thereby giving the boys and girls the benefit of the experience of the men who are doing the work and solving the problems of that community.

The Board of Education of Bristol, Conn., has passed a rule permitting high-school pupils to substitute music, either instrumental, vocal, or theoretical, for a high-school study. In order to do this they must do a specified amount of work under a teacher approved by the board of education and reports must be made by the music teacher and the parents in regard to progress and practice. The superintendent reports good results from this plan.

CONSOLIDATION OF HIGHER EDUCATION IN MONTANA

Some months ago the *School Review* reported briefly the move which was being made in Montana in the direction of consolidating her institutions of higher education. The *Tribune*, of Great Falls, Mont., published on July 23 the following article, which sets forth the result of that movement:

According to the will of the legislature as expressed at the last session the institutions of higher learning were consolidated into one institution to be known as the University of Montana. The board of education was instructed to cut out all unnecessary duplications in the courses of studies at the institutions located at Missoula, Bozeman, Dillon, and Butte, and were authorized as a means to this end to appoint a chancellor of the unified university to supervise and regulate under their instructions the schools at the separate cities

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which were to constitute departments of the consolidated University of Montana. This action of the legislature was taken after it had definitely turned down a bill which proposed to consolidate the various schools phyiscally as well as theoretically by abandoning the present separate locations of the schools and bringing them together in one city to be selected by a referendum vote of the people, every city in the state that desired the location to be given the privilege of submitting a bid for the location. The majority of the legislature felt that the effect of such a contest would be worse than the capital fight. They therefore substituted the present scheme of theoretical consolidation and the operation of the several schools at their present locations as departments of a consolidated university.

In carrying out this plan as ordered by the legislature the state board of education appointed a committee of experienced men to report on duplications that should be eliminated in the various schools. That committee has performed its task and its report has been adopted. It was not a pleasant task, because it was not possible to perform it without creating some dissatisfaction and disappointment in the schools where present courses were eliminated, and the students taking them obliged to go to another institution. Yet the committee performed its task with courage and fidelity, and perhaps it may truthfully be said that their decision involves the minimum of dissatisfaction. They followed the plan of dividing the courses given in the College of Agriculture and Mechanic Arts at Bozeman and the university at Missoula into two rough divisions, the fine arts and liberal arts going to Missoula and the mechanic arts and technical courses to Bozeman. Under this division the engineering course at Missoula was sent to Bozeman, and pharmacy and several other courses, including what they termed vocational English, which were taught at Bozeman, were sent to Missoula.

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BOOK REVIEWS

Medieval Story and the Beginnings of the Social Ideals of English-speaking People. By WILLIAM WITHERLE LAWRENCE, PH.D. New York: Columbia University Press, 1911. Pp. xiv+236.

It is a pleasant task to read and appraise such a book as Professor Lawrence' *Medieval Story*. Professor Lawrence has undertaken to outline the history of the great mediaeval stories and to discover in them the beginnings of the social ideals of English-speaking people. One is glad to review the mediaeval stories, so familiar through reference and in modern versions, though often unknown at first hand, and even more glad to find in them the prototype of much that is splendid and hopeful in our modern state. Particularly will this volume appeal to the students of literature and history.

It is hardly conceivable that any teacher of English literature of whatever grade would consciously lack such acquaintance with our English stories of the Middle Ages and earlier periods as may be gained from these eight chapters. It is true, some of the stories, such as "Reynard the Fox" and the "Song of Roland" do not appear in any of our English readings in schools. But the Arthurian story, the story of the Holy Grail, the Robin Hood ballads, "Beowulf" not infrequently, the "Canterbury Tales" less infrequently do so appear. This book, the best brief book on this subject that I know, is needed by teachers of such readings.

It deals with the origin of these stories, outlines each story in fascinating summary, compares briefly the different versions, and indicates at every turn the social ideals to be found in each, not forgetting the modern or related forms of these stories, like Scott's ballads, Tennyson's "Idylls," Lowell's "Vision of Sir Launfal," Uncle Remus' Brer Rabbit stories, Kipling's "Just-So Stories," and "Jungle Books," Maeterlinck's "Blue Bird," and others. Here is the vigor of Beowulf ruling in "warlike and democratic, yet cultivated and highly-conventionalized society." Then we see the heroism of Roland, symbol of a "consecration to a higher ideal of church and state"; we see Arthur, "the champion of the forces of righteousness." We discover knightly and ascetic ideals in the Grail legend opposed to the cynicism and satire of "Reynard the Fox" and tempered by "the hatred of sham and oppression" shown by that hero of the common people, Robin Hood. And at last we view the recognition and acceptance of social consciousness in the "Canterbury Tales."

The author points out how "Beowulf" reveals the temper of the early Anglo-Saxon people, the Song of Roland marks the introduction of French ideals, the Arthurian legends and the legend of the Holy Grail embody the spirit of chivalry against which may be set the democratic protests of Reynard

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the Fox and Robin Hood. The Canterbury Tales continue the expression of the democratic movement and mark the opening of the era of complex social struggle in which we find ourselves.

Altogether this is a highly satisfactory book. It is worthy of the Columbia University Press and of the author. A brief but excellent classified bibliography is appended to answer the question, sure to arise, "Where can I read some of these stories at first hand?" The matter of these chapters was delivered as eight lectures in Cooper Union, on the Hewitt Foundation, before an average audience. Only intelligent interest was assumed. As printed the lectures have been altered but little; they are for the general reader as much as for the student. They cannot fail to instruct and entertain. One might spend some words commending Professor Lawrence' compact style, which permits and merits no skipping and one must speak if only briefly of the frequent admirable references to modern stories and poems, and to modern social ideals. It is refreshing to find here Brer Rabbit and the "Jungle Books" and the "Blue Bird," and cowboy songs and mention of modern politics and modern cartoons all woven cleverly and helpfully into the fabric of these chapters.

SAMUEL FOSS HOLMES

WORCESTER ACADEMY
WORCESTER, MASS.

The Enjoyment of Poetry. By MAX EASTMAN. New York: Scribner, 1913.

There are many recent treatises on poetry, which would explain its essential nature to the student. But Mr. Max Eastman's *Enjoyment of Poetry* differs from the most of these in several points. They aim directly at increasing our knowledge about poetry, and only indirectly at increasing our enjoyment of it. Mr. Eastman's book makes directly and avowedly for our fuller appreciation of poetry, imparting by the way such understanding of its larger aspects and elements as this end demands.

Mr. Eastman's fundamental conception of his subject gives ground for further distinction. Poetry is too often, even in these days of genetic and functional psychology, analyzed rather as a finished product than as a living process. Mr. Eastman is concerned with the act of poetry, wherever it may be found, not only in print, but in common talk, even in slang. He examines this poetic process through the lenses of modern psychology, but these are so clear that the reader feels himself to be using his own unmediated vision. Instead of dealing with poetry, then, as an isolated phenomenon, limited to a few favored individuals, Mr. Eastman recognizes the poetic activity as an essential stage or element in our mental life. "Poetry but dwells upon and perfects that significant imagery which is the material instrument of all thinking." Though primitive folk and children instinctively use this natural instrument of all thinking, "Education soon robs them of this quaintness. They are taught that they must get understanding, they must not linger and behold."

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Those who submit to this discipline become the practical people, who are chiefly occupied in attaining ends, while the poetic people are absorbed in receiving and realizing experiences. Or, to use Mr. Eastman's initial illustration, the poetic type of person is interested in crossing the river on a ferry-boat, the practical type is merely interested in getting across. The poetic process is essentially one of realizing the experience at hand, not merely adjusting oneself to it.

This is the primary thesis of Mr. Eastman's book, and we can therefore understand at once why "Of all things poetry is most unlike deadness," why it demands the mood of leisure, the capacity for "vigorous idleness," and the spirit which revolts against custom and routine. Because it demands leisure, poetry has in this age grown aristocratic and feminine, and must depend for its democratization upon "a drastic redistribution of the idle hours."

Reading this book should serve as a delightful means whereby the person who does not care for poetry might find out what it really is. One wishes that children in the schools could have poetry administered to them by teachers who had such a broad, vital, and fundamental notion of it as this. There would then be fewer "practical men" who have no part in our inheritance of English poetry, fewer college students who read it only under the compulsion of class requirement.

The chapter on "Poetry Itself," was made brief, Mr. Eastman explains, "because it contributes little to what is already contained in other books." But the reader who has followed with delight the unconventional and genuine thinking of the previous chapters is disappointed. Why not encounter at first hand these problems also? A more searching analysis of the so-called formal elements of poetry might, one feels, have yielded results altogether commensurate with those achieved in the handling of the larger aspects of the subject.

Mr. Eastman's delightful scorn of education in general and of the teaching of literature and of the ancient figures of speech in particular makes joyous reading, but leaves, at least in the academic mouth, a taste of unfairness, or perhaps rather a suggestion that the writer is not familiar with more recent developments in these fields.

Such minor criticisms, however, seem ungracious in the presence of this genuine contribution to a sound and large estimate of the great fact of poetry. Its easy discursive style, intershot with vivid images and singularly expressive phrases, should give its ideas wide currency and thus make possible for more of us the use of "the poetry of words . . . . as a means toward the poetry of life."

GERTRUDE BUCK

VASSAR COLLEGE

A Textbook in the History of Modern Elementary Education. By SAMUEL CHESTER PARKER. Boston: Ginn & Co., 1912. Pp. xxiv+505.

At the present time there is a general opinion among educators that the history of education must justify itself. A *Kulturgeschichte*, a diluted history

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of philosophy, a series of biographical sketches, or an account of educational theories may be interesting and have its place in a liberal education, but it is no longer to be considered a history of education, and those interested in training teachers are beginning to insist that it has little value for their work. There is, accordingly, an evident demand for a textbook that will genuinely function, and, without formulating it in this way, Dean Parker has undertaken to furnish such a work. To accomplish this, his book seeks especially to emphasize (1) the developments of actual school practice, (2) English and American conditions, and (3) changes since the eighteenth century. In this he has admirably succeeded. The book steers clear of both the Scylla of unsupported generalizations and pseudophilosophic interpretations and of the Charybdis of dead-level detail that have destroyed many a fair historical craft. Where educational events or theories have had no appreciable effect upon the administration, content, or method of education, Mr. Parker does not give an account of them for the mere sake of exhausting the subject (and the reader), nor does he strive for an impossible condensed description. Instead, he frankly dismisses them from his discussion. Yet he seems to feel the need of perspective and attempts to give all procedure its appropriate setting in the social conditions and underlying theories of the time.

The main division of this history of elementary education is based upon the transfer of schools from ecclesiastical, which Mr. Parker describes as "religious," to civic and national, which he calls "secular," control. This terminology is likely to prove misleading, but the discrimination is essential and the method of approach indicates the universalizing and centralizing process that has fundamentally characterized the development of modern education. The description throughout is clear and interesting, but the author evidently has in the past given more study to Parts II and III and understands their field better than that included under Part I. Chaps. viii and ix are especially strong. Mr. Parker gives the impression of having lived with his *Emile*, and he seems to have a broader conception of the significance of Rousseau to the history of education than anyone who has yet written on the subject, without excepting Morley, Davidson, Monroe, or Boyd. He appreciates the importance of Pestalozzi's social reform, except that there is no mention of its relation to the education of defectives, and yet is not overcome with sentimentality concerning that great teacher's love for little children. The tracing back of standard American textbooks on geography, arithmetic, language, and elementary science to the objective methods of Pestalozzi, and the account of the formalized and degenerate object teaching that has exercised so baneful an influence upon school practice, constitute most profitable departures from the beaten path. In his treatment of Herbart and Froebel, the author reacts almost too strongly to the common overemphasis upon the metaphysics of these writers. In fact, Mr. Parker seems to be something of a *philosophobe*, if one may coin a word after the Worcester school. It is well to show that Herbart's tutorial experience furnished the basis for his pedagogy, and that his system of metaphysics was

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an afterthought, but a brief description of his graphic psychology would at least have aided the student in understanding his educational theories, especially "apperception," "interest," and the "moral aim of education." Nor is it true that "according to his [Herbart's] metaphysics, the possibilities of education are unlimited," while "according to his pedagogy, the teacher must keep constantly in mind the limitations of education" (p. 381). The parenthetical phrase, "as generally interpreted," somewhat saves this statement, as both adherents and opponents of Herbart have been singularly blind to his appreciation of the innate and instinctive, but his interpreters have overlooked this feature in his psychology, as well as in his pedagogy, and it is as apparent in the one as in the other. Again, Mr. Parker is one of the few who have brought out the influence of Froebel upon educational practice in all stages of education today, and have not lost the clue of "motor expression" and "social participation," with their effect upon the development of "manual training," "busy work," etc., in the maze of idealism, romanticism, and *Naturphilosophie*. But is it fair to state that, although "Froebel probably derived his educational theories to a considerable extent from his fundamental philosophy, and they were consistent with it, since most students do not know or understand the theories or the history of modern philosophy, it is not worth while here to attempt to study Froebel's philosophy in order better to understand how he explained his educational belief"? This, however, is apparently to be understood somewhat in a Pickwickian sense, for Mr. Parker himself proceeds at once to give the gist of Froebel's philosophy (p. 433), to show its origin and significance (p. 435), and to discuss at some length the value of his mysticism and symbolism (pp. 439–41 and 458–60).

This reception at the back door of material rejected at the front, however, is only an exaggeration of Mr. Parker's characteristic method of presentation, which is psychological rather than logical. While he seems, in the case of Froebel, to have created the impression of an unsolvable mystery, and at other times his psychological treatment dislocates a subject, as in the history of special subjects in the curriculum, generally speaking, this method of procedure proves most natural and attractive. Mr. Parker has written his text upon the model of a well-conducted recitation, and fully justifies himself as a professor of educational method. The book is, however, occasionally marred by infelicities in style. For example, one might question the mixed construction in the second paragraph on page 222, and the repeated use of the first personal pronoun (pp. 362, 380, 409, 413, 424, etc.) in a narrative otherwise in the third person, although it is done, strangely enough, in the interest of scholastic modesty. A few slight inaccuracies also appear. If Mr. Parker followed present-day debates in ecclesiastical circles, he would not equate the English Church with the Episcopal (p. 228). It was Joseph Neef, not "Naef" (pp. 288, 297, 500), who taught at Burgdorf and became his master's disciple in America, although Elizabeth and Conrad Naef were among those associated with Pestalozzi. And while the book bears evidence of great care, there are

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still some inadvertencies on the part of the author, or "improvements" introduced by the printer; such, for example, as: controled (p. 208), Quick, P. H., for "R. H." (p. 224), pole tax (p. 262), Strassberg (p. 313), National Teacher's Association (p. 332), Levy for "Levi" (p. 370), and the studies (for "study") of the historical subjects (p. 393).

The criticisms above may, however, seem pedantic and captious, in view of the real merit of the book. Mr. Parker's text is, in general, the type of "thing we long have sought, and mourned because we found it not." It will be of real service in training teachers, especially for elementary grades. The brief statement of the main points at the beginning of each chapter will greatly assist the student in his reading and will prove an excellent means of reviewing and making the connections between various parts of the book. The illustrations have been well chosen and will often heighten the reader's mental picture. The author has been fortunate in being able to draw upon the invaluable Plimpton collection and other sources for his visual material. From the *Tower of Knowledge* of Gregorius Reisch, which first appeared in 1504, to the most modern examples of constructive work in the Dewey experimental school, the illustrations are pertinent, clear, and attractive.

FRANK P. GRAVES

OHIO STATE UNIVERSITY

General Science. By BERTHA M. CLARK. New York: American Book Co., 1912. Pp. 352. Illustrated. Laboratory manual for the same. Pp. 96.

General Science, as the name would signify, is a book containing material from a number of sciences. The chief topics included are mechanics, heat, light, electricity, hygiene, applied chemistry, and physiography. As may be seen from this list, there is no attempt to include any botany or zoölogy as such, though yeasts and molds are dealt with in connection with hygiene and chemistry.

Since the author has dispensed with the traditional divisions of material it is interesting to note her standard of selection. In the preface we find a statement of this: "No claim is made to originality in subject-matter. The actual facts, theories, and principles used are such as have been presented in previous textbooks of science but the manner and sequence of presentation are new, and, so far as I know, untried elsewhere. These are such as in my experience have aroused the greatest interest and initiative, and such as have at the same time given the maximum benefit from the informational standpoint."

As usefulness and interest determine the subject-matter, so do interest and simplicity determine the method of presentation. The book is certainly interesting, and simple enough to be used by a seventh-grade pupil with appreciation. For an example of its style and method I quote the following discussion of the expansion of solids which follows a similar discussion on liquids: "Not only liquids are affected by heat and cold but solids also are subject to similar

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changes. A metal ball which when cool will just slip through a metal ring will, when heated, be too large to slip through the ring." (Here a pictorial illustration is provided.) "Telegraph and telephone wires, which in winter are stretched taut from pole to pole, sag in hot weather and are much too long. In summer they are exposed to the fierce rays of the sun, become strongly heated, and expand sufficiently to sag. If the wires were stretched taut in summer there would not be sufficient leeway for the contraction, and in winter they would snap." Accompanying the text is a laboratory manual. This provides for simple exercises to illustrate the facts given in the text. Here also no difficulties are met with in the way of mathematical problems or complicated apparatus. Each experiment is to show clearly some simple principle learned in the text. For example, to accompany the above-mentioned study of the expansion of metals an exercise is given to the pupils. In brief it is this. A bar of iron is measured, heated a given number of degrees, and measured at the new temperature. From the data so obtained the expansion of one centimeter of iron when heated one degree is determined. "This is the coefficient of expansion of iron." The experiment is not so conducted as to provide any considerable degree of accuracy, but it will at least impress the fact that the iron did expand and, if properly conducted, should make the pupils keen in observing the means of adjustment to such action in bridges, rails, etc.

This book does not provide a course in science in the sense of affording a training in scientific thinking or developing a scientific attitude toward the phenomena studied. What it does accomplish is to give the child a great deal of information about the things with which he has most to do and to explain those phenomena which most concern him. It has the same relationship to physics, hygiene, and chemistry that nature-study has to botany and zoölogy. As a text to follow one in nature-study in the grades *General Science* would be excellent. Like the texts in Nature-Study it has been free to consider the interests of the pupil aside from any traditional course of study requirements or even of justification as a mental discipline.

At the time of the seventh and eighth grades most children, particularly boys, have a great interest in knowing how and why many things are done. It is the age of planning and making things, the age when a boy wants to do something practical. At this time the demand is great for popular science literature and for books such as *How to Make a Sail-Boat*. Since children will apply a large part of their interest in this way it seems as though this energy might be much better used if intelligently encouraged in school by such a text as *General Science*.

JOHN A. MONTGOMERY
UNIVERSITY OF CHICAGO

The Country School. By HOMER H. SEERLEY. New York: Scribner, 1913.

The main title of this book is not inclusive enough. The explanatory subtitle, "A Study of Its Foundations, Relations, Developments, Activities,

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and Possibilities," conveys a more adequate idea of its scope. Though perhaps it offers nothing new on the work of actual teaching in the schoolroom, it organizes current knowledge on the subject into a workable body of information, intended specifically for the country teacher. The possibilities of the country school are dealt with at large. Fully developed it is to be a community center, reflecting every phase of community life. It is comparable to the city community center with a difference in activities demanded by country living. Though many activities are included which can be classified as neither urban nor rural, the lines are drawn sharply to exclude urban material, foreign to country living. This book is valuable to country livers in that it lays out a scheme of conscious development for them, based on past growth.

MABEL LODGE

IOWA STATE TEACHERS COLLEGE

Hygiene for the Worker. By WILLIAM H. TOLMAN and ADELAIDE WOOD GUTHRIE. Edited by C. WARD CRAMPTON. New York: American Book Co., 1912. Pp. vii+231. $0.50.

The growing tendency in recent years to make hygiene instruction popular and practical has been carried to the extreme limit in this volume.

"To equip the worker to care for himself under actual working conditions as they exist today and to add to his happiness and efficiency are the two purposes of the book." These purposes should be realized in a large measure if this little book falls in the hands of intelligent and ambitious boys and girls of fourteen to eighteen years of age.

There are nineteen chapters dealing with the main topics of personal hygiene and with subjects of particular interest to wage-earners such as: "Applying for a Position"; "Preparing for the Day's Work"; "Good Habits for the Worker"; "The Noon Hour"; "After Hours"; "Holidays and Outings"; "Choice of Occupation"; "Occupational Dangers"; "Fire"; "First Aid to the Injured"; and "What a Worker Has a Right to Expect."

The presentation is interesting and the information seems to be in general accurate, although some rather dogmatic statements are found, as on p. 20: "Tight, unventilated hats cause premature baldness in many men," and on p. 12: "A cold bath is far more beneficial than a warm one in the morning."

The book is illustrated with excellent drawings. "Emphasis is placed upon the constructive aspect of the illustration, and pictures of the distressing and disagreeable are not to be found."

GEORGE L. MEYLAN

COLUMBIA UNIVERSITY

The Elements of English Versification. By JAMES WILSON BRIGHT and RAYMOND DURBIN MILLER. Boston and London: Ginn & Co., 1910. Pp. xii+166.

Designedly elementary, this textbook presents its material clearly, tersely, and thoroughly. It cannot escape the accusation of being rather dry, almost

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flat; and in this respect it has been found less acceptable than Alden. On the other hand, it gains, by casting off the historic method, an immediacy of approach to the technique of a living art. Its chapters take up in succession verse units, the foot, the meter, the stanza, the poem of conventional form, with introduced chapters on scansion and the quality of sounds. Examples, though scanty, are uniformly provided, well chosen, and printed in readable type. The interested student will inevitably crave more; and for him it might have been well to add reference lists to other poems. The editors pronounce it difficult "to withhold comments on the aesthetic function of the forms and conventionalities of the art." Better had they not taken the pains! Brief notes, such as that the sonnet was originally and has been chiefly used for amatory verse, that blank verse is characteristic of most epic and dramatic poetry—with perhaps a mere note on the periods of their greatest influence and achievement—would have enriched the book at slight cost of space.

Positive faults of detail are few. In the index it should be stated whether the reference is to section or page. The reference to peonic verses from § 15*d* is incorrect, as is that in the index. Reference should be made from p. 31, l.1, to § 65 for stichic verses. The citation of many classical meters with no example from Campion seems incongruous. And Herrick's lines (p. 16) certainly lose their intended funereal effect if read as the editor suggests.

In Alden's book we have history; here we have technique. But should not a book on versification have the atmosphere, if it be not instinct with the spirit, of poetry?

PERCY W. LONG

HARVARD UNIVERSITY

A Hundred Years of History, 1216–1327. By HILDA JOHNSTONE. London: Longmans, Green & Co., 1912. Pp. xv+292.

Miss Johnstone, lecturer in history at Manchester, England, has translated a number of extracts from the chroniclers, together with a few statutes taken from Stubbs, to illustrate English history from the accession of Henry III to the death of Edward II.

With the exception of the summons to the magnates of the realm and the Provisions of Oxford (from Stubbs) and the Peace of 1259 between Henry III and Louis IX (from Rymer's *Foedera*), all the extracts of the first 118 pages—about half the book—are from Matthew Paris, the chief of the great historical school of the Benedictine abbey of St. Albans.

When Matthew Paris' vivid and entrancing chronicle ceases, at the year 1259, Miss Johnstone depends on several sources for her extracts. The Barons' Wars and their effects on contemporaneous politics are told partly from the chronicle of Rishanger, the continuator of Matthew Paris, and a partisan of Simon de Montfort and the barons, partly from Thomas Wykes, chronicler of Osney near Oxford, and the sole supporter of the Crown among contemporaneous historians of the great struggle. This is the most illuminating

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part of Miss Johnstone's compilation, because it gives a glimpse of the policy and principles of both the king's party and the confederated barons.

The very important years of Edward I's reign, from the accession down to the Scottish period (1272–91), are passed over with very scanty notice. They occupy only fifteen pages (150–64) out of nearly three hundred. It is difficult to see why the author, who has given us many pages of details of the French expeditions of Henry III, should have omitted almost the slightest reference to the enduring work of the first twenty years of the English Justinian.

For the close of Edward I's reign Miss Johnstone relies almost entirely on the chronicle of the Yorkshire annalist Walter of Hemingburgh and for Edward II's reign (which with disproportionate emphasis occupies the last third of the book, pp. 203–90) the authority is the anonymous *Vita Edwardi II*, with very few extracts from Geoffrey le Baker's eulogizing chronicle of Edward II, the Yorkshire *Gesta Edwardi*, and the *Annales Paulini*. It would have been interesting had the author drawn more largely on the last-named source, for the chronicler of St. Paul's was a Londoner and a layman. Few chronicles of the Middle Ages reflect the civic spirit and still fewer transcend the monastic point of view.

We are puzzled to know just what function Miss Johnstone's interesting collection of extracts could fulfil in the pedagogical scheme. As a "source-book" it could serve only for a class studying a most restricted portion of English history, and for the special student of the mid-Plantagenet period it could by no means replace the full text of Matthew Paris, Hemingburgh, on the statutes of the realm. The advanced student will not need this reprint of extracts from record and chronicle; and for the elementary student, the extracts, presented as they are without introduction or comment, and in such great abundance would, we fear, be somewhat confusing and bewildering.

D. S. MUZZEY

ETHICAL CULTURE SCHOOL
NEW YORK CITY

The Teaching of Mathematics in Secondary Schools. By ARTHUR SCHULTZE. New York: Macmillan, 1912. Pp. xx+370. $1.25.

This book differs from the two well-known books on the teaching of mathematics—the one by Professor David Eugene Smith, the other by Professor J. W. A. Young—in that it covers a much more restricted field. The book is for the most part a publication of a series of lectures, delivered by the author at New York University, in which he aimed to give concrete discussions of problems which arise in actual teaching. Excepting the two introductory chapters, the author has largely avoided generalities and has confined himself to concrete illustrations of effective methods of attack of fundamental topics. Although the book contains much material that is obvious and commonplace to the experienced teacher, it will, nevertheless, prove valuable to him, because of the numerous exercises and many clear figures. There are 118 exercises and

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51 figures in the chapter on equality of triangles (chap. viii) alone. The various topics are treated in sufficient detail to be of great assistance to the inexperienced teacher.

The author is a vigorous exponent of the disciplinary value of education. In the preface its purpose is stated as being "to make mathematics teaching more disciplinary and less informational." It is, therefore, more important for a student "to learn how to demonstrate, than to learn demonstrations." Throughout the book emphasis is placed upon the importance of training pupils how to attack a problem. Two chapters (chaps. xi and xv) are devoted entirely to the modes of attacking theorems and problems.

The first chapter is a general discussion of the causes and remedies of the present inefficiency of the teaching of mathematics. False aim on the part of the instructor, memoriter work on the part of the student, "star" students, and attaching great significance to spectacular results obtained by examinations for which deliberate preparation has been made, are the chief evils stated. The second chapter deals in detail with the aim and disciplinary value of mathematics. The remainder of the book deals with the following topics: various methods (chap. iii), definitions (chap. v), the first propositions in geometry (chap. vi), original exercises (chap. vii), miscellaneous topics of the first book of geometry (chap. x), proportion theorems (chap. xiv), impossible constructions (chap. xvi), remarks on solid geometry (chap. xvii), applied problems (chap. xviii), and the teaching of trigonometry (chap. xix). Topics or pure mathematics are treated under foundations of mathematics (chap. xiv), methods of attack (chap. xv), limits (chap. xiii), and the circle (chap. xii).

In the last chapter the following principles are stated regarding the teaching of trigonometry: (1) emphasize all parts applicable to practical problems or which lead indirectly to such applications; (2) reduce topics which require memorizing; (3) define functions as the quotients of the sides of the right triangle; (4) introduce general definitions and extended theory late in the course, after the student has applied the elementary theory to many practical problems. Most of the textbooks recently published bear out these principles which seems to indicate that teachers of trigonometry are accepting these principles as basic.

In the chapter on the curriculum of algebra, there is a brief discussion of combined mathematics. The author attempts to state both sides of the argument, but it is clear that he has little sympathy with complete correlation of algebra and geometry. It is to be noted that he gives but two reasons against the correlation movement: (1) that this is in an experimental stage, (2) that "there exist many high schools in which the first-year students are not capable of attacking geometry as successfully as algebra" because "algebra resembles arithmetic." In the light of European experience and the recent experience of a rapidly increasing number of high schools in the Middle West, the first argument needs no longer to be refuted. The condition given as the second reason would be extremely hard to prove. Progressive grade teachers

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are everywhere insisting that they be permitted to teach the elementary theorems and applications of geometry because (1) it is natural, (2) their students have the ability, and (3) students are interested in this type of mathematics. This demand is sound in the light of modern pedagogy. The equations of generalized arithmetic are being emphasized. All this means correlated mathematics in the upper grades of the elementary school. Under this condition correlated mathematics follows in the first year of high school because it "resembles arithmetic" of the grades.

Thus there will be a natural and unbroken development from the time the student has mastered the fundamental number concepts in the lower elementary grades to the advanced university courses. The questions to be asked are: (1) Ought the condition which the author describes to exist? (2) If not, would not a proper correlation eliminate it?

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BOOKS RECEIVED

LATIN, SPANISH, GERMAN, AND FRENCH

Giese, William F. Graded French Method. New York: Henry Holt & Co., 1913. Pp. x+438.

Hebel, I. P. Stern, Menco (Ed.). Schatskästlein des rheinischen Hausfreundes. New York: American Book Co., 1913. Pp. 179.

Picard, Dawson, John C. (Ed.). La Petite Ville. Boston: Ginn & Co., 1913. Pp. xx+177. $0.40 net.

Prokosch, E. German for Beginners. New York: Henry Holt & Co., 1913. Pp. xiii+336.

Schmidhofer, Martin. Erstes Lesebuch für amerikanische Schulen. Boston: D. C. Heath & Co., 1913. Pp. 139. $0.40.

Tunstall, Robert W. The Latin Ladder; Introductory to the Study of Caesar. New York: Macmillan, 1913. Pp. xiv+290. $0.90 net.

MISCELLANEOUS

Baldwin, Ralph L., and Newton, E. W. Standard Song Classics. For High Schools and Academies. Choruses for mixed Voices. Boston: Ginn & Co., 1913. Pp. 162. $0.60.

Chamberlain, Arthur Henry. Ideals and Democracy. Chicago: Rand, McNally & Co., 1913. Pp. x+173.

Dopp, Katherine Elizabeth. The Early Sea People. For Intermediate Grades. Chicago: Rand McNally & Co., 1912. Pp. 224. $0.50.

Harper, Merrit W. Animal Husbandry for Schools. New York: Macmillan, 1913. Pp. xxii+409. $1.40.

Jevons, F. B. Comparative Religion. Cambridge University Press, 1913. Pp. vi+154. $0.40 net.

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SCIENCE AND MATHEMATICS

Berry, A. J. The Atmosphere. Cambridge University Press, 1913. Pp. 146. $0.40 net.

Black, N. Henry, and Davis, Harvey N. Practical Physics for Secondary Schools. Fundamental Principles and Applications to Daily Life. New York: Macmillan, 1913. Pp. 469. $1.25 net.

Coulter, John M. Elementary Studies in Botany. New York: D. Appleton & Co., 1913. Pp. 455. $1.30.

Franklin, William S., MacNutt, Barry, and Charles, Rollin L. An Elementary Treatise on Calculus. South Bethlehem, Pa.: The Authors, 1913. Pp. x+253+38.

Höfler, Alois. Didaktik der Himmelskunde und der Astronomischen Geographie. Berlin: Druck und Verlog von B. G. Teubner, 1913. Pp. 414. M. 11.

Kahlenberg, Louis, and Hart, Edwin B. Chemistry and its Relations to Daily Life. A Text-Book for Students of Agriculture and Home Economics in Secondary Schools. New York: Macmillan, 1913. Pp. 393. $1.25 net.

Kent, Frederick C. A First Course in Algebra. New York: Longmans, Green & Co., 1913. Pp. iv+249. $1.00.

Kenyon, Alfred Monroe, and Ingold, Louis. Trigonometry. New York: Macmillan, 1913. Pp. 124. $1.35 net.

Paynting, J. H. The Earth, Its Shape, Size, Weight and Spin. Cambridge: University Press. New York: G. P. Putnam's Sons, 1913. Pp. 140. $0.40 net.

Wentworth, George, and Smith, David Eugene. Academic Algebra. Boston: Ginn & Co., 1913. Pp. iv+440. $1.20.

EDUCATION AND PHILOSOPHY

Burks, Frances Williston, and Burks, Jesse D. Health and the School. A Round Table. New York: D. Appleton & Co., 1913. Pp. xviii+340.

Gray, Clarence Truman. Variations in the Grades of High School Pupils. Baltimore: Warwick & York, Inc., 1913. Pp. 120. $1.25.

Kerschensteiner, Georg. Begriff der Arbeitsschule. Berlin: B. G. Teubner, 1913. Pp. 143. $1.50.

King, Irving. Education for Social Efficiency: A Study of the Social Relations of Education. New York: D. Appleton & Co. Pp. vi+311.

O'Shea, M. V. Everyday Problems in Teaching. Indianapolis: Bobbs-Merrill Co., 1913. Pp. 388+xlii.

Pintner, Rudolf (Translator). The Idea of the Industrial School: Kerschensteiner, Georg. New York: Macmillan, 1913. Pp. 110. $0.50 net.

Robison, A. T. The Applications of Logic. New York: Longmans, Green & Co., 1912. Pp. x+219.

Smith, David Eugene. The Teaching of Arithmetic. Boston: Ginn & Co., 1913. Pp. iv+196. $1.00.

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CURRENT EDUCATIONAL LITERATURE IN THE PERIODICALS[1]

IRENE WARREN
Librarian, School of Education, University of Chicago

Aldrich, F. R. Industrial education in the early nineteenth century. El. School T. 13:478–85. (Je. '13.)

Atwood, Wallace W. A new way of studying astronomy. Sci. Am. 108:557–58. (21 Je. '13.)

Bagley, W. C. Do the high schools need reconstruction for social ends? Relig. Educa. 8:176–83. (Je. '13.)

Bailey, Thomas P. Mood in monologue. Pedagog. Sem. 20:222–28. (Je. '13.)

Bancroft, Jessie H. New efficiency methods for training the posture of school children. Am. Phys. Educa. R. 18:309–12. (My. '13.)

Bawden, William T. Wentworth Institute. Voca. Educa. 2:357–73. (My. '13.)

Belcher, Katharine F. The Sabbatical year for the public school teacher. Educa. R. 45:471–84. (My. '13.)

Beulah Miller as a scientist saw her. Lit. D. 46:1087–91. (10 My. '13.)

Bevard, Katherine H. Progress of repeaters of the class of 1912 of the public schools of Washington, D.C. Psychol. Clinic 7:68–83. (My. '13.)

Brandon, Edgar Ewing. The largest Latin-American university. Educa. R. 46:31–38. (Je. '13.)

Brereton, Cloudesley. The character-forming influence of vocational education. Educa. R. 45:501–6. (My. '13.)

Butler, Nathaniel. Report of the Twenty-fifth Educational Conference of the Secondary Schools in Relations with the University of Chicago. School R. 21:398–411. (Je. '13.)

[1] *Abbreviations:*—Am. J. of Psychol., American Journal of Psychology; Am. Phys. Educa. R., American Physical Educational Review; Educa., Education; Educa. R., Educational Review; El. School T., Elementary School Teacher; Geographical T., Geographical Teacher; Harp. W., Harper's Weekly; J. of Educa. (Bost.), Journal of Education (Boston); J. of Educa. Psychol., Journal of Educational Psychology; J. of Home Econ., Journal of Home Economics; Lit. D., Literary Digest; Liv. Age, Living Age; Man. Train. M., Manual Training Magazine; Outl., Outlook; Pedagog. Sem., Pedagogical Seminary; Pop. Sci. Mo., Popular Science Monthly; Pri. Educa., Primary Education; Psychol. Clinic, Psychological Clinic; Relig. Educa., Religious Education; School R., School Review; School W., School World; Sci. Am., Scientific American; Teach. Coll. Rec., Teachers College Record; Tech. World M., Technical World Magazine; Voca. Educa., Vocational Education.

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Carmichael, R. D. The meaning of graduate study. Science 37:738–43. (16 My. '13.)

Chickering, Edward C. Efficiency methods in Latin teaching. Educa. R. 46:15–24. (Je. '13.)

Children's reading. Harp. W. 57:6. (31 My. '13.)

(The) coming International Congress on School Hygiene. Pedagog. Sem. 20: 267–70. (Je. '13.)

Cook, W. A. The problem of sex education. J. of Educa. Psychol. 4:253–60. (My. '13.)

Cope, Henry F. Ten years progress in religious education. Relig. Educa. 8:117–49. (Je. '13.)

Courtis, S. A. The reliability of single measurements with standard tests. El. School T. 13:486–504. (Je. '13.)

Crawshaw, Fred D., and Phillips, J. D. Report of a committee on mechanical drawing for high schools. II. Man. Train. M. 14:458–65. (Je. '13.)

Curry, H. Ida. County agencies for dependent children of state charities aid association of New York. Child (Chicago) 2:22–24. (Jl. '13.)

Dearborn, George V. N. Notes on school-life hygiene. Pedagog. Sem. 20: 209–21. (Je. '13.)

Dewey, John. An undemocratic proposal. Voca. Educa. 2:374–77. (My. '13.)

Donovan, M. E., and Thorndike, Edward L. Improvement in a practice experiment under school conditions. Am. J. of Psychol. 24:426–28. (Jl. '13.)

Enright, H. G. Census to save the babies. Tech. World M. 19:539–42. (Je. '13.)

(The) eye and the printed page. Educa. 33:552–69. (My. '13.)

Whipple, Guy Montrose. The eye movements in reading.
Briggs, Thomas H. The right way to read.
Koopman, Harry Lyman. How students actually read.

Faddis, Jennie Rebecca. Our play day. Pri. Educa. 21:331–33. (Je. '13.)

Frederick, Frank Forrest. Co-operation between the school and the shop. Voca. Educa. 2:414–17. (My. '13.)

Grady, William E. Curriculum making. Psychol. Clinic 7:57–67. (My. '13.)

Greater flexibility in college entrance requirements. Educa. 33:527–51. (My. '13.)

Holmes, William H. The needs of the high school.
Huntington, Henry B. The attitude of the colleges.
Davis, Harvey N. The new Harvard plan.

Hadley, Arthur T. The relation of science to higher education in America. Science 37:775–79. (23 My. '13.)

Hall, Winfield S. Conservation of the child as related to social ethics. Child (Chicago) 2:7–14. (Jl. '13.)

Digitized by Google

Handschin, Charles Hart. The American college as it looks from the inside. Pop. Sci. Mo. 82:556–58. (Je. '13.)

Harper, Carrie A. A feminine professorial viewpoint. Educa. R. 46:47–51. (Je. '13.)

Hemmingway, William. Building men—not champions. Harp. W. 57:11. (14 Je. '13.)

Hirshberg, Leonard Keene. "Dog Latin" and sparrow languages used by Baltimore children. Pedagog. Sem. 20:257–58. (Je. '13.)

Hodgkins, Louise Manning. The higher education of women in 1912. Educa. 33:610–15. (Je. '13.)

Holbrook, Sara M. The home environment as affecting the physical and mental growth of school children. J. of Home Econ. 5:211–17. (Je. '13.)

Horace Mann Elementary School Teachers. Curriculum of the Horace Mann Elementary School. Arithmetic, geography, history and music. Teach. Coll. Rec. 14:1–76. (Mr. '13.)

Howard, Frank E. Psychological differences between children and adults. Pedagog. Sem. 20:236–53. (Je. '13.)

Hurt, Huber William. Vocational guidance in college. Voca. Educa. 2:411–13. (My. '13.)

Kelly, Amy. Novel-reading for high-school girls. Home Progress 2:34–40. (Jl. '13.)

Kuhlmann, F. The results of grading thirteen hundred feeble-minded children with the Binet-Simon tests. J. of Educa. Psychol. 4:261–68. (My. '13.)

Kuo, P. W. Effect of the revolution upon educational system of China. Educa. R. 45:457–70. (My. '13.)

Leavitt, Frank M. The reorganization of secondary education. III. J. of Educa. (Boston) 78:44–45. (10 Jl. '13.)

———. Vocational guidance and the manual arts. Man. Train. M. 14:423–30. (Je. '13.)

Lindsey, Ben S., and Creel, George. Children in bondage. Good Housekeeping 57:15–22. (Jl. '13.)

Macdonald, Greville. The fairy tale in education. Liv. Age 277:783–90. (28 Je. '13.)

Mackinder, H. J. The teaching of geography and history as a combined subject. Geographical T. 7:4–19. (Spring, 1913.)

MacLear, Martha. My mind and I and the kindergarten. Pedagog. Sem. 20:254–56. (Je. '13.)

Mall, F. P. University education in London. Science 38:33–39. (11 Jl. '13.)

Mangold, George B. A new line of attack on infant mortality. Child (Chicago) 2:25–27. (Jl. '13.)

Marrinan, John J. The children and religion. Pedagog. Sem. 20:229–35. (Je. '13.)

———. Vocational education for the rural school. Educa. R. 44:39–46. (Je. '13.)

Digitized by Google

Meighan, Charles W. Where schools make men. Tech. World M. 19:692–95. (Jl. '13.)
Mentre, Francois. The A B C of a philosophy of handwork. Man. Train. M. 14:431–33. (Je. '13.)
Model for rural open air school. Child (Chicago) 2:34–36. (Jl. '13.)
Moore, E. S. Lecture and recitation methods in university instruction. Science 37:929–32. (20 Je. '13.)
More, Paul E. The paradox of Oxford. School R. 21:369–87. (Je. '13.)
Morrison, Richard. Bringing the stars to earth. Tech. World M. 19:772–75. (Jl. '13.)
Muir, James N. How to determine normal progress in school. Educa. R. 46:10–14. (Je. '13.)
Munroe, James P. The business man and the high-school graduate. Pop. Sci. Mo. 83:73–80. (Jl. '13.)
Oliphant, James. Secretarial training for girls. School W. 15:241–43. (Jl. '13.)
Papillon, Thomas L. What is going on at Oxford. Educa. R. 45:433–43. (My. '13.)
Pintner, Rudolf. Oral and silent reading of fourth grade pupils. J. of Educa. Psychol. 4:333–37. (Je. '13.)
Pope, Elfrieda Hochbaum. Women teachers and equal pay. Pop. Sci. Mo. 83:65–72. (Jl. '13.)
Prosser, Charles A. The meaning of industrial education. Voca. Educa. 2:401–10. (My. '13.)
Pulsifer, Harold Trowbridge. Poetry and the school. Outl. 104:521–23. (5 Jl. '13.)
Putnam, George A. The women's institutes of Ontario. J. of Home Econ. 5:197–203. (Je. '13.)
Roman, Frederick W. Control of the industrial schools of Germany once more. El. School T. 13:469–74. (Je. '13.)
Roosevelt, Theodore. The high school and the college. Outl. 104:66–68. (10 My. '13.)
Rowe, Eugene C., and Rowe, Helen Niles. The vocabulary of a child at four and six years of age. Pedagog. Sem. 20:187–208. (Je. '13.)
Rynearson, Edward. Do the high schools need reconstruction for social ends? Relig. Educa. 8:176–83. (Je. '13.)
Schuster, Arthur. The National Academy of Sciences: international co-operation in research. Science 37:691–701. (9 My. '13.)
Scott, Jonathan F. Economic reasons for vocational education. Pedagog. Sem. 20:259–67. (Je. '13.)
Selvidge, Robert W. The culture elements in the manual arts. Man. Train. M. 14:413–16. (Je. '13.)
Should he have told? A question of conduct. Outl. 104:563–68. (12 Jl. '13.)

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Slingerland, W. H. The defective child of the twentieth century. Child (Chicago) 2:37–43. (Jl.' 13.)
Social service and the public schools. Lit. D. 46:1230. (31 My. '13.)
Stearns, Wallace N. What does it cost to build a college? Educa. 33:616–18. (Je. '13.)
Stevens, Ellen Yale. The Montessori movement in America. McClure 41:84, 86, 89, 92, 94. (Je. '13.)
Sutton, William S. Some principles of moral instruction. Educa. R. 46:1–9. (Je. '13.)
Talbot, Marion. The vocational and cultural value of domestic science. J. of Home Econ. 5:232–36. (Je. '13.)
Tassin, Algernon. The disclosures of a college elocution class. Educa. R. 45:485–500. (My. '13.)
Terman, Lewis M., and Hocking, Adeline. The sleep of school children, its distribution according to age, and its relation to physical and mental efficiency. J. of Educa. Psychol. 4:269–82. (My. '13.)
Tests of school efficiency. By an ex-teacher. Educa. 33:604–9. (Je. '13.)
Titchener, E. B. The method of examination. Am. J. of Psychol. 2:429–40. (Jl. '13.)
Tombo, Rudolph, Jr. German and Swiss university statistics. Science 38: 77–78. (18 Jl. '13.)
Vaughn, S. J. The moral significance of the vocational motive. Educa. 33:591–603. (Je. '13.)
Weeks, Arland D. A summer school poet. Educa. R. 46:25–30. (Je. '13.)
Wheeler, Charles G. A manual training workshop built by grammar school pupils. Man. Train. M. 14:417–22. (Je. '13.)
When corporal punishment for children is right. Outl. 104:523–26. (5 Jl. '13.)
White, Frank R. Industrial education in the Philippine Islands. II. Voca. Educa. 2:378–400. (My. '13.)
Wilkin, Robert J. Children's courts. Child (Chicago) 2:28–29. (Jl. '13.)
Willard, Meriel W. Training high-school girls for trade work. J. of Home Econ. 5:219–23. (Je. '13.)
Winship, A. E. Rural Cook County's leadership. J. of Educa. (Bost.) 77:693–96, 707–8. (19 Je. '13.)
Witter, John H. The Chicago boy's club. Child (Chicago) 2:30–32. (Jl. '13.)
Wolfson, Arthur M. Efficiency of the history recitation. Educa. R. 45:444–56. (My. '13.)
Yamada, Soshichi. A study of questioning. Pedagog. Sem. 20:129–86. (Je. '13.)
Yoakum, C. S., and Calfee, Marguerite. An analysis of the mirror drawing experiment. J. of Educa. Psychol. 4:283–92. (My. '13.)

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THE SCHOOL REVIEW

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THE SHIFTING SCHOOL POPULATION

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Any discussion of the general topic of the economy of time in education must include a consideration of the social factors involved in the agencies included in organized educational endeavor. Certain well-defined groupings are to be noted in any such study. It not infrequently happens that these groupings are so clearly set off and class consciousness is so manifestly evident that actual class antagonisms develop. Traces of such clashes between boards and teachers, teachers and students, are by no means infrequent. Even a rough grouping of the school population reveals a number of classes. For example, the school-board members, the superintendents, principals, teachers, and students, to say nothing of medical inspectors, school nurses, attendance officers, janitors, etc.

Consideration of the social setting of any educational situation forces home the fact that any proposed reorganization is conditioned by social laws operating relentlessly, even if imperceptibly. Prejudices must be overcome, leadership must be developed, and public opinion must be created, and, not least, patience for evidences of results must be observed.

In a democracy social changes are wrought slowly, through the influence of well-known sociological forces, not through fiat from any authoritative source. Leadership of propaganda involving social change, such as an educational reorganization, must have certain qualities of stability, of permanence, in order to be effective.

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The question arises as to whether or not there are peculiarities about the school population which in any way limit the attainment of the desired reorganizations to be effected in the economy of time. What of the permanence with which this population is held together? Will next year find the same group at work on the same problem? For how long a time can we count upon an aggressive campaign? These and similar questions make it worth our while to direct attention to the mobility of the different school groups within the larger group.

SCHOOL BOARDS

A study of the forces, legal and otherwise, which control the tenure of members of boards of education, school trustees, or school committees, reveals the fact that provisions are such as to make their term relatively short. The majority of states have passed legal enactments limiting the term to three years. Some states have even gone so far as to place limitations barring a member from immediate re-election to a second term. This is something of a measure of the American attitude toward anything like permanence in holding what is considered to be a state office. Indeed, in many cities there is a more or less constant struggle to secure change in membership of the board, in order to effect changes in the schools or in the handling of the school funds. With this condition as it is, are we to be surprised at the fact that the disposition to shift responsibility for serious undertakings to oncoming boards is so common?

With the annual change in the complexion of the board, it is not surprising to find that hesitation is manifest on a proposition to undertake a policy whose outcome requires a campaign for a period of years. Commercial and industrial organizations have long realized the value of stability in policy, and more and more do we see plans developed by these interests to guarantee stability in control. Long-time leases, incorporated organizations, centralization of control, all are manifestations in one way or another of the necessity for stability. What bank or mercantile establishment or manufacturing concern could prosper under a system of directorship with so short a tenure and such a shift of personnel as that

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found among school directors? The shifting of membership, which means too often a shifting of responsibility, is certainly not favorable toward undertaking a struggle for reorganization which may be prolonged through a long period of time.

Warm personal relationships are nowhere more apparent than in the relationship which surrounds the school-board membership. Proposed economies not infrequently involve a readjustment of some *human* relationship. With the shifting nature of the board of education it is but natural that they shrink from making changes which affect these human relationships. Even though we may get intellectual assent to the wisdom of a proposition involving change, it is quite another thing to get a board actually to make changes, if these changes include any wholesale personal readjustments.

SUPERINTENDENTS

The early visitation committee, which at times grew to the proportion of a town delegation headed by the town officials and the local dignitaries, gave way to a system of visitation, inspection, or supervision by an agent of the board called the school superintendent. Many of our modern school superintendents have become more or less expert in doing the things which they set out to do. The question arises as to whether or not these men are of sufficient permanence in their relationship to the problems concerned to be able to bring about the changes necessary in order that genuine economies may be effected in the organization of school activities. Even though these men are in constant contact with the schools, it must be remembered that the social forces operative in the schools are of such a nature that constructive organization demands continuity of policy for a considerable period of time.

Conditions which affect school superintendents vary somewhat from one section of the country to another with the differences in size of community units. An analysis has recently been made of the data concerning over 1,200 city superintendents employed in towns of 4,000 population or over throughout the United States. (This material was taken from the 1912 directory issued by the U.S. Commissioner of Education.) One hundred and seventy-one of these superintendents had been newly elected to their

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position, almost one-fourth of the number had been in their present position two years or less, and only about half of them had been in their present position more than four years. No one knows just what significance is to be attached to these figures, yet it seems reasonable to assume that it takes some little time for the newly elected superintendent to become personally adjusted to a situation, to say nothing of the time it takes to make an intelligent professional adjustment. The general state of unrest which accompanies the fact that even in the largest cities changes in the office of school superintendent are frequent is certainly not conducive toward the serious consideration of policies which can only be effected after a long-drawn-out struggle. It is certainly significant in this connection that schools famed for their excellence are almost always headed by men who have remained in charge for a period of time much longer than the median tenure for the superintendents of the largest cities in the country.

A study was made last year of the tenure of Indiana superintendents by Mr. Edwards, a graduate student in Indiana University. He found that for the year 1912 the median tenure of 186 Indiana superintendents was 2.16 years. Almost one-third of the men were new to their position that year. As a further check on the same thing, figures were gathered for the tenure of the Indiana superintendents for almost a half-century. It was found that the median tenure for 1864 was 1.8 years; for 1874, 2.5; for 1884, 2.3; 1894, 2.4; 1904, 2.9 years. Thus it is seen quite clearly that the heads of the schools of Indiana have always been a rapidly shifting lot. With as many as one-third of the positions open some years, and for a half-century, roughly, half of the positions open every other year, it would seem that this condition deserved consideration in any attempt at interpreting school conditions. The forty-six men receiving salaries above $1,500 had a tenure of only four years, thus showing that Indiana conditions are not far different from conditions throughout the country as a whole.

A similar analysis was made of Iowa conditions in a graduate class in the State University of Iowa. In 1912 the superintendents in 250 accredited schools had a median tenure of only two years. Forty per cent of the superintendents were new to their position

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that year. Figures were gathered for 1902 for the same cities. It was found that conditions were almost identical, both in median tenure and new appointments to positions. The situation was even more striking when schools were added which were not on the accredited list. In this case, out of 768 schools considered, 340, or 46 per cent, of the positions were open last year; 190, or 24 per cent, additional positions were open the year before; thus 550 or, 70 per cent, of the heads of these schools had been in their positions two years or less. This gives something of the amount of shifting in the executive population of the schools of Iowa.

The figures for the large cities of the country, for the accredited and non-accredited schools of particular states, all point in the same direction, and show quite clearly that, not only in the past but today, school superintendents are itinerants, shifting by hundreds and even thousands, if the smaller communities are to be considered, annually. Is not this a factor to be considered in any plan for modifying school conditions which actually change the school organization? Someone has said that "we reward school men by allowing them to move away." This is certainly true of superintendents, and this feeling permeates the whole group. Professional advancement comes by shifting to a new position, rather than through the recognition of an increased value by a grateful community. Indeed, the necessity for shifting from position to position is so clearly recognized today that many superintendents tend to apologize to colleagues for staying in one position for any length of time; and is it not true that public sentiment in many communities is inclined to measure success or failure by the same standard? Some states actually forbid the election of a superintendent for a longer period than one year. When advancement comes by jumping to new positions, it is small wonder that the ambitious school man tends to direct attention toward the things that can be quickly adjusted with only a little friction, rather than to attack the big things that can only be effected through a persistent campaign for a period of years.

PRINCIPALS

When attention is directed toward the high-school principals, the same question arises. How long do they remain in their posi-

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tion? Do they remain long enough to justify them in attempting to solve big problems of organization? To what extent are high-school policies continuous?

Mr. Shideler of Indiana University has made an analysis of certain social features of 183 principals in the Indiana high schools. Taken irrespective of the size of towns concerned, it was found that 45 per cent of these men were new to their positions last year. In the towns of over 25,000 population one-third of the men were new, while in the smallest towns almost two-thirds of the number were new to their situation. This gives some idea of the shift within this group.

The difficulties of personal adjustment in connection with home, church, and social conditions had to be met at the same time as the professional adjustments to boards, superintendents, teachers, and pupils. When it is realized that a large proportion of the latter were also new to the situation it is not surprising to learn that many of these high-school principals failed to make a satisfactory adjustment in time for re-election the next year and were forced again to shift positions. The traditions, customs, and social forces were operative both in the school and the community continuously. These pressures did not wait for the new man to grasp the situation. They go relentlessly on. Certainly any modifications to be made in the internal organization of the high schools are conditioned by the fact that there are such insistent surface adjustments to be made by such a large proportion of the high-school principals annually. This shifting of position for the principal is the logical outcome of present operating conditions, in regard to school salaries and tenure in the state. For illustration, 160 cases were analyzed to find out the relation between salary paid and number of years in present position, with the following results:

Year in Position	No. of Cases	Median Salary
1	74	$715
2	30	799
3	22	775
4	16	776

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From these figures it is seen that the men who stay the second year get slightly higher median salary than those who stay one year. But those who stay three or four years in the same position actually receive lower salaries. In the long run the men able to command the higher salaries leave after they have stayed a couple of years, while the poorly paid ones are the ones whose tenure is the longer.

A comparison of the median salary paid in different classes of towns indicate that the high-school principal can find his best hope for increased earnings by jumping to another position. The median salary for principals in the six classes based on population was as follows:

Size of Town	Median Salary
A	$ 632
B	690
C	906
D	985
E	1,233
F	1,588

This salary difference, coupled with the fact that from one-third to two-thirds of these positions are vacant annually, tempts the principal constantly to try for a prize in another town. That they are not unsuccessful in this attempt to secure jobs in a large system is shown by the following analysis of the median total number of years' experience of the principals in the different classes of towns:

Size of Town	Median Years Experience	Median Beginning Age	Median Salary
A	5	20	$ 632
B	7	19	690
C	5	19	906
D	7	19	985
E	15	18	1353
F	15.5	19.5	1588

Thus principals with the same amount of median experience and even actually younger median beginning age, receive $264 more salary in class C towns than in class A towns. Again, principals with the same amount of experience and the same beginning age

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receive $295 more salary in class D towns than in class F towns. Principals with the same amount of experience receive $355 more salary in class F towns than in class E. The high-school principal who analyzes the conditions under which he works will realize that the road to increased earnings is to shift from towns of one population class to another. This process is going on so rapidly that there are from one-third to two-thirds of the principalships open all along the line.

As to the effect of the situation little can be said specifically. We do know, however, that development of internal school policy takes time. The social fabric of the high school is of such nature that many evils cannot be corrected by official decree. Certainly such a rapid shift of administration is unfavorable for any change which needs scientific investigation, social leadership, and continuity of policy. The very nature of these demands is such that they are well nigh impossible under present conditions.

TEACHERS

It is trite to call attention to the importance of the teaching group in the scheme of education. Certainly any proposals for effecting economy of time must be considered in connection with the teaching population. Hence the question arises again. To what extent do these people remain in one position long enough to become effective agents in making anything like permanent improvements?

An analysis of the careers of over 850 high-school teachers in Indiana brought out the fact that almost 40 per cent of these teachers were new to their positions last year; upward of 50 per cent had been in their present position two years or less. In the largest cities almost one-fifth of the positions were filled last year, while the number amounted to almost three-fifths in the smaller towns. The slightly better salaries paid in the larger towns coupled with the fact that there are many vacancies annually in each of the population groups tend to make the teacher look to a position in another school rather than to permanence of tenure in a particular school. Thus the inexperienced teacher accepts almost any place the first year, with the expectation of capitalizing the experi-

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ence by shifting to a slightly better school the second year, a still different school of a somewhat higher class the third year, and so on. Some idea of the extent of this procedure is gathered from the fact that half of the teachers in towns of 10,000 or less have a total experience of 5 years or less. The wasteful effect of this plan for the smaller communities is serious. The small town annually affords practice for the inexperienced teacher. This teacher goes to a larger town and gets further practice for a still larger town. It might not be so bad to put up with one year's practice, if the teacher who profited by the practice would stay in the community long enough to be of genuine service in helping to solve the local problems.

That this shifting among high-school teachers is not confined to small schools or particular states, is shown by the following figures for the teachers in the high schools on the approved list of the North Central Association of Colleges and Secondary Schools. In Wisconsin out of over 800 teachers 46 per cent were new to their position last year; in Colorado, 44 per cent; in Missouri, 37 per cent; in Iowa, 37 per cent; in Indiana, 40 per cent.

It is to be hoped that students of educational administration will give some attention to the problems of evaluating the effect of a change of teachers. A recent application of the Courtis tests in an Iowa school brought out the fact that the work in arithmetic was from one to four grades below normal in an eighth grade that had changed teachers three times this year. This is but a straw and may mean nothing. However, when it is realized that in Iowa the shifting among elementary teachers is even more than among high-school teachers it should be followed up by further investigation. (The recent Iowa Schools Commission estimates that 72 per cent of the rural schools of Iowa have a new teacher every year and $33\frac{1}{3}$ per cent, three new teachers each year.)

STUDENTS

No adequate investigation has been made of the mobility of the students from school to school. However, a recent postal-card inquiry sent to a list of towns in the North Central territory selected at random, brings out the fact that the students in the first-year high school are heavily drawn from outside school systems. Some

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high schools report as many as one-third of the students of their Senior class as not having done all their high-school work within that particular school. The central tendency for this characteristic is about one-fifth. These figures are in a measure indicative of the interdependence among high schools. The problem of assimilating pupils from other schools is by no means insignificant. Dr. Keyes found that the changing pupil doubled his expectancy of non-promotion. These factors have served in the past for the justification of many of the features of uniformity, such as textbooks, course of study and the like. These conditions cannot be ignored in any plan of reorganization.

The school teachers have been characterized by Dr. Coffman as a nomadic lot. The same characterization can be rightfully applied to the whole of the school population. Are we not then face to face with some of the limitations to be found in a nomadic group of society? Would it not be worth while to attempt to build up a different attitude toward the shifting population? Many factors are today operating toward placing a premium upon rapid change of position; might it not be possible by intelligent recognition of this situation to place a premium upon results to be obtained only by continuity of service? Hail the day when it shall become socially respectable and economically safe for a larger proportion of our school population to stick to one task until some measure of real progress is effected!

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RELATIVE EFFICIENCY OF PUBLIC AND PRIVATE SECONDARY INSTITUTIONS

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INTRODUCTION

In his report to the Corporation of Harvard University for the year 1906–7, President Eliot commented at some length as to the distribution of honors both in regard to classes represented and in regard to the preparatory schools represented in the honor lists. He said: "It is true that the public schools deliver to Harvard College a large majority of the men who, during their college life, attain high standing as scholars. Out of 199 scholarship-holders for the year 1906–7, 129 were prepared in the public schools. . . . . The list of these candidates entitled to Commencement Posts contained 112 names, 75 of whom come from the public schools while only 37 come from endowed and private schools." Nothing is said as to the relative number from each type of preparatory school, but statistics show that the endowed and private schools furnish the majority in the entering classes of Harvard.

In the president's report to the Yale Corporation for 1911, Dean Jones of Yale College, commenting on this same subject, says, "The general tendency of high-school students to do better work in college than those who have prepared at private schools is observable in this class (1914). The general average for high-school men in their work from October 1 to March 20 was 272.6, while the average for all the Andover, Exeter, Hill, and Hotchkiss men was 263.9 for the same period." The four schools named send 105 out of the 186 men sent from all the private schools. Further, in commenting on this same class, he says: "In December, 74 had made records which placed them on the Honor List; 27 of these were high-school men and 47 were from private schools so that 33⅓ per cent of the high-school men and 28 per cent of the private-school men constituted the division."

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From the *Harvard Alumni Bulletin* of January 3, 1912, the following is quoted:

> An analysis of the lists [of scholars for the current year] shows some interesting results. Classified according to schools, of the scholarships in Group I, 37 went to men from public high schools, 12 to men from endowed and private schools, 4 to men who came from tutors, other colleges, or through some other mode of preparation. In Group II, 80 scholarships went to men from public high schools, 27 to men from endowed and private schools, 24 to men from tutors, other colleges, etc. In Group III, 78 scholarships went to men from public high schools, 18 to men from endowed and private schools, 12 to men from tutors, other colleges, etc. Here is a very striking preponderance of high standing among men who come from the public high schools, for the numbers coming from these schools and from the endowed and private schools are not far from equal: for, in the three classes which count here (leaving out the men from tutors, other colleges, etc.), about 45 per cent came from the public schools and 55 per cent from the private. Anyone who wishes to argue from these figures, however, must take into account the fact that almost all the men who are working their way through Harvard College, in whole or in part, come from the public schools, and that they have therefore a potent incentive to study which is in every way worthy, but which the other men do not have. Even with this allowance, however, these lists make clear the strong and substantial quality of the men sent to Harvard from the public high schools.

These three reports served to suggest this study. Educational conditions in New England differ radically from those in the Central West. In the East there is no notable system of state universities nor is the public high school held in such esteem as in the West. Moreover, the academy has always flourished in the East while the high school is probably best developed in the central states. The following questions therefore suggested themselves: Would a study of the records of students of the University of Chicago reveal the same results as those given in the three reports quoted? Is the public high school more efficient as a college-preparatory institution than an endowed or private school? Parents and educators have been asking these and similar questions for many years, and it was in the hope of throwing more light on this mooted point that this study was undertaken.

THE PROBLEM

The problem, then, may be stated as follows: "To determine the relative efficiency of public and private secondary institutions." Two separate lines of investigation will be taken up:

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I. Through a short historical sketch of the rise and development of each type of school, the present status and the purposes of each will be shown.

II. From an examination of marks of students in the University of Chicago, conclusions will be drawn as to the relative efficiency of the two kinds of institution in preparing students for college.

Throughout this discussion the word academy will be used to designate all private educational agencies, whether endowed, under church control, or under private ownership, which are doing work of secondary grade; that is, by academy is meant any (private) "school or seminary of learning holding a rank between a college and a common school." (International Dictionary).

I. HISTORICAL SKETCH

Of the two school types which are to be compared the academy is the older, dating as far back as Franklin Academy in Pennsylvania and the Dummer Academy in Massachusetts. Not until 1780, however, through the founding of the Phillips Academy at Andover did there really exist an academy, a school type which is distinctively an American product. From that time on for almost three-quarters of a century, the academy held a dominant place in the American school system. The high-water mark was probably reached in 1850 when the figures of the national commissioner placed the number of academies as between 6,000 and 7,000. This was the zenith of its influence and popularity. Since 1860, there has been a gradual decline until, according to the commissioner's report of 1910, the number of academies was only about 1,800. This period marking the decline of the academy has been coincident with the period of rapid increase in the number of high schools. While on the decline, yet the academies contained more than one-half of all the secondary students in the country until 1880 and were not passed by the high schools in enrolment until 1887. In the last few years there has been a renewal of interest in private secondary education, manifested by the establishment of new schools, by an increase in enrolment in private schools, and especially by the activity of Catholics and Episcopalians in the founding of modern, well-equipped, and expensive church schools.

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The academy came into existence as a result of nonconformity both in education and in religion. The law of 1789 in Massachusetts which freed so many of the towns from the obligation of supporting a grammar school, the rise of the district system, and the growth of the spirit of democracy and nationality caused a decline in education. Feeling the need of higher education than that provided by the state and loving learning for its own sake, many individuals founded small academies that the torch of learning might be kept burning. But the new spirit in America must find its outlet in some new way. The grammar school and college were of English origin—un-American and conservative. They were bound to tradition. In this new school tradition was honored but not revered, the new scientific spirit found a home and democracy found its own peculiar institution. Then, too, the more tolerant religious attitude which had been growing up with the multiplicity of sects demanded a school which should be religious and yet not sectarian, and in the boards of these academies this spirit found expression through the fact that men of all sects worked harmoniously together.

From the standpoint of the public the position of the academy was anomalous. At first purely a private institution and independent of public control, it later became a semi-public institution and a beneficiary of the state. The example set by Massachusetts of endowing academies with grants of public lands was largely followed by the other early states. The laws granting these lands usually contained provisions that the endowment of the schools should be increased by private gifts amounting to a specified sum, and that the schools themselves should be open to state inspection. Under these favorable influences the academies multiplied rapidly and became a great influence for good even though that influence was not conducive always to the founding of higher public schools. Martin says:

> When we hear of the scanty opportunity afforded to children in the first half of the century [nineteenth], the few weeks in the little red schoolhouse under the ignorant and incompetent instructor—we must keep in mind the fact that in every town some of the children, as they reached the years of maturity, were receiving the elements of culture. A single term in the academy might serve—often did serve—to give a new turn to life; to open the windows

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of the mind, often of the soul, to new and refining influences, to make the young man and the young woman more susceptible to the spirit of progress which was the spirit of the age. If we ask in brief what the academies did—they trained the leaders of two generations.

These statements were made particularly concerning the Massachusetts situation, but the history of education in all the states, with the exception of the more western, will tell the same story. Indiana and Ohio repeated the history of the early colonies, and what state law failed to do in many of the states of the Central West, was done by private effort and religious enthusiasm. Wherever a new settlement became permanent and facilities beyond the elementary school could not be provided, the academy came into being to minister to the higher wants of the community. It was the pioneer school, often pre-empting the ground even in advance of the little red schoolhouse. It is true that many of these academies had no right to the name either as then or as at present understood, and there were many variants from the general type; yet of whatever grade or type, they rendered a real service to their respective communities and prepared the way for the public schools. In the early Colonial day teachers were for the most part educated in the academy where they went for one or more terms. In this way the academies were the direct forerunners of our normal schools and nourished the sentiment necessary for their later establishment. Another signal service of the academies was that connected with the education of women. The early grammar schools were not open to girls but the academies recognized and admitted them from the first. If such schools were not coeducational, the establishing of the one school always brought about the founding of a corresponding school for girls.

But, popular and useful as these academies were, they were not the people's schools—they were privately owned and privately managed and lent themselves to the fostering of a spirit of aristocracy. All demanded tuition fees, while the elementary schools were free and publicly managed. Governor Samuel Adams voiced one of the earliest protests when he said that the academy did not produce a spirit or desire for free public schools, but on the contrary fostered a spirit in favor of private schools. Perhaps these protests

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long went unheeded because the academy made no extra demands upon the community. But the demand for higher free education under public control could not be resisted always and so in 1821 Boston established a high school which was the first in the country and which was the forerunner of the splendid schools of secondary grade we have today. Many other towns followed Boston's example, but the growth of the high school was slow. Before its establishment in any town, the whole discussion of high school versus academy had to be gone through with. The late Commissioner Harris estimated that shortly before the Civil War there were only 40 high schools in the whole country. There certainly were more than this number having the name high school at this period and he probably came to his conclusion by a process of elimination in which he discarded all schools which were not doing secondary work exclusively. The growth of the high school since 1860 has been in many ways phenomenal. From the small number existing before the Civil War, there was an increase until in 1900 there were 6,005 high schools and in 1910, 10,213. In the last decade, then—the period which this study covers—the number was increased over 66⅔ per cent and the number of secondary students is increasing more rapidly than our population, for while the population increased 47 per cent since 1890, the number of pupils in secondary schools increased 208 per cent.

This rapid development gives us two agencies in the secondary field of education. Naturally they are to some extent rivals, for they do the same kind of work and draw from the same patronage. And they always have been rivals. Before Boston had established her first school, when the better citizens were casting about for means to extend the field and character of free public education, the conflict began. It dates back, then, to the beginning of the nineteenth century and is bound up with the question of the state being responsible not only for elementary training, but also for secondary and higher education. Let us see how this spirit of rivalry came into being and what it really means.

When the academy first came into existence, it existed primarily for giving the student an education which was in advance of the elementary school and which was intended to prepare him for the duties of citizenship. There was not much thought at first as to

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the preparation for college. Soon, however, the academies in a measure influenced the colleges and in their turn were influenced by them, so that at the time of the rise of the high school and a little later the academy fitted primarily for college and incidentally for life. The new school which came in then in response to a popular need fitted primarily for life and incidentally for college. With the growth of the colleges and especially with the growth of the state universities, the high school has been drawn farther and farther from its original purpose and consequently was becoming more and more a fitting school until recently when a halt was called. This action on the part of the public schools has forced the academy back again into giving courses calculated to prepare for life as well as for college. Both schools, therefore, are trying to perform a double task with the result that they do neither of them as well as they could do one. As the high school must always be the people's school, it must always be responsive to the popular will. In this case its course of study must ultimately point toward the practical and utilitarian rather than toward the higher education which must of necessity be for the few. Here, then, is the hope and opportunity of the academy. It must make of itself a supplementary agency, doing what the high school cannot do, and with that purpose in mind, pursue its work. Along these lines there would seem to be adequate place for both schools. Commissioner Brown sums it up as follows:

> There is evidently room in our system of public education for more than one type of secondary-school organization. More than that, there is evident need of schools of different types for the satisfaction of diverse wants and the attainment of various public ends. The making of these schools represents a high development of the spirit of co-operation. The earlier academy movement was a missionary enterprise—a bringing to the people of something for the people's good. The spirit which it embodied is one of the finest things in all the world, a mainstay of our hopes for the betterment of human life. The high schools, on the other hand, appeal far less to the imagination and to sentiment. Their promoters did not set about doing good to the people, but rather undertook to work with all the people for the common good. Here, too, we touch one of the finest things in all the world, the spirit which draws all men together in a common pursuit of the public welfare.

We are therefore in a transition period. The high school has plainly usurped the distinctive purpose and position of the academy

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and the latter has been forced to the wall. The weaker schools have ceased to exist and others have become high schools, while many, especially in the West, have grown into colleges. The decline in the number of academies and the phenomenal increase in the high schools is best shown by the following table, taken from the national commissioner's *Report* for 1910.

Year	High Schools				Academies			
	No. Schools	Percentage	No. Students	Percentage	No. Schools	Percentage	No. Students	Percentage
1900...	6,005	75.22	519,251	82.41	1,978	24.78	110,797	17.59
1901...	6,318	76.95	541,730	83.25	1,892	23.05	108,221	16.65
1902...	6,292	77.42	550,611	84.02	1,835	22.58	104,690	15.98
1903...	6,800	80.04	592,213	85.33	1,690	19.96	101,847	14.67
1904...	7,230	81.82	635,808	86.01	1,606	18.18	103,407	13.99
1905...	7,576	82.32	679,702	86.38	1,627	17.68	107,207	13.62
1906...	8,031	84.01	722,692	87.66	1,529	15.99	101,755	12.34
1907...	8,804	85.99	751,081	88.55	1,434	14.01	97,110	11.45
1908...	8,960	87.16	770,456	89.37	1,320	12.84	91,651	10.63
1909...	9,317	87.75	841,273	89.98	1,301	12.25	93,656	10.02
1910...	10,213	85.15	915,061	88.63	1,781	14.85	117,400	11.37

The aggregate numbers of schools and students given in the table are much too low, as the national bureau has the names of hundreds of public high schools and academies from which reports could not be obtained.

The national bureau also gives the numbers for the North Central Division of states which includes Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas. As these are the states from which the University of Chicago draws many of its students, the following figures taken from the 1910 *Report* are quoted for them:

Enrolment for 1909–10		Increase over Year 1908–9	Per cent
High-school students	403,813	High-school students	14.93
Academy students	55,038	Academy students	24.45

II. STATISTICAL STUDY OF GRADES

In working out the second part of the study the method of procedure was as follows: The names were taken alphabetically from the alumni list of the University of Chicago—discarding all those who had entered before January 1, 1900, and also those

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who entered with more than five majors of advanced standing. With these limitations upon the choice of names it was possible to secure only 170 graduates of academies. In order to make a ratio of 1:2, the names of 340 high-school graduates were taken. A careful record was made of all honors secured by each individual as well as the average for the full college course. In addition, a record was also kept of all the failures made by each student. The method was as follows: Each student, upon entering the university, is given a record sheet in the Bureau of Records upon which is written the following data: preparatory school; date of matriculation; course pursued; grades for each subject studied; date of graduation; degree; honors received; election to Phi Beta Kappa; scholarships; and average for the four years' course. These items were tabulated with the results shown in the tables below in which the grades have the following significance: A, 91–100; B, 76–90; C, 61–75; D (conditioned), 51–60; E, failure. Minus and plus are used to make closer discriminations. The following table gives the number from each school who secured the descriptive averages:

	D	C–	C	C–	B–	B	B–	A–	A
Academy.....	0	13	32	36	42	19	20	8	0
High school.....	1	8	35	62	89	65	41	38	1

A series of graphs and tables was made to illustrate, first, the general distribution of the 510 students according to their marks (Fig. 1) and, second, the distribution of the students from each type of school (Figs. 2 and 3). For purposes of comparison the whole number was divided into five groups, I, II, III, IV, V, beginning with the highest in rank. As these arbitrary divisions did not follow the divisions between the grades, it was necessary to remove some from one grade to complement those in another so as to make the full quota for that quintile. When such a step was necessary, the number removed was always composed of those from each type of school in proportion to the number of each in the grade from which it was taken.

In each quintile division, therefore, if the schools ranked equaly, the proportion should be one to two, i.e., there should be 34 academy

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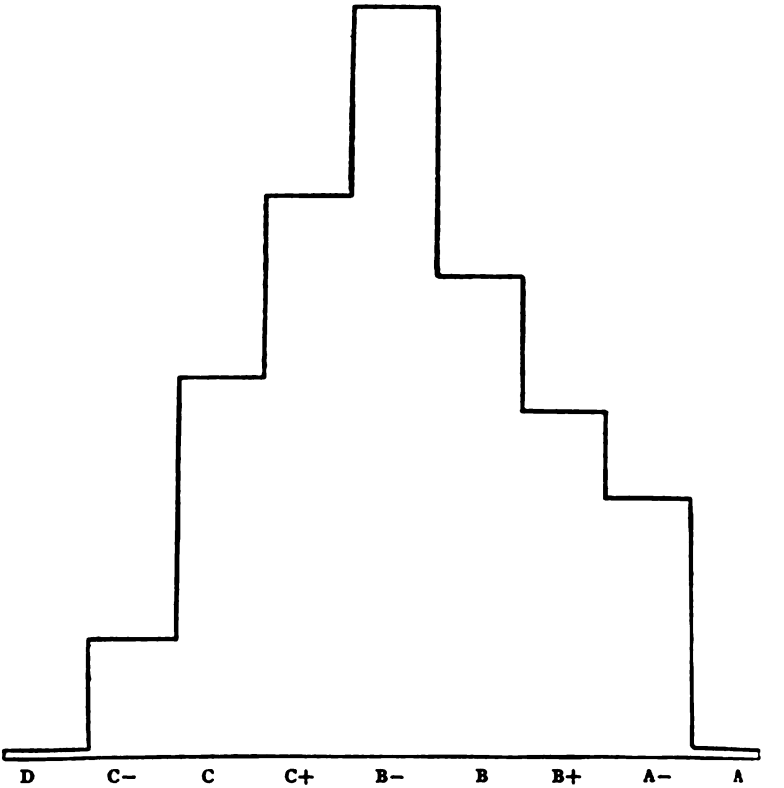
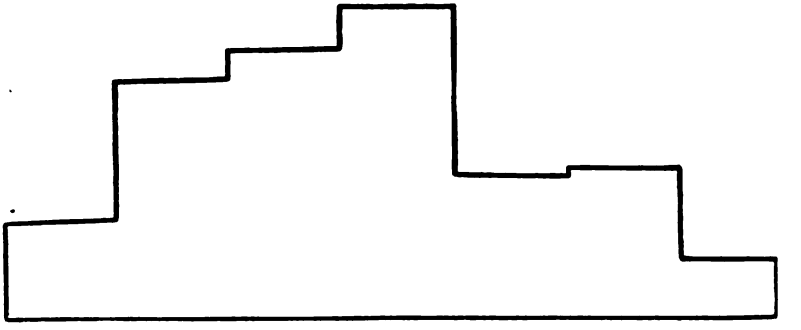


	D	C−	C	C+	B−	B	B+	A−	A
Academy—	0	13	32	36	42	19	20	8	0
High school—	1	8	35	62	89	65	41	38	1

FIG. 1.—510 preparatory students. Median B−



	C−	C	C+	B−	B	B+	A−
Students—	13	32	36	42	19	20	8

FIG. 2.—170 academy students

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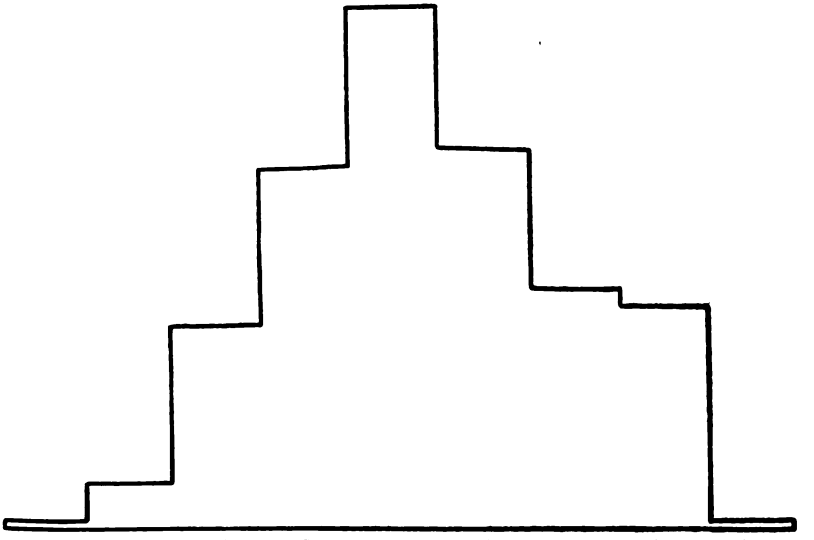

FIG. 3.—340 high-school students

FIG. 4

When arranged in quintile division the numbers in each division are as follows:

	V	IV	III	II	I
Academy—	50	37	32	25	26
High school	52	65	70	77	76

The variations for the academy students are given in the nearest integers:

V	IV	III	II	I
+15%	+3%	−2%	−9%	−8%

Since the variations for the high school are equal with opposite signs, no chart is made for them.

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students and 68 high-school students. A graph (Fig. 4) was constructed to illustrate this, in which the base lines represent the normal for each school. The broken line traces the variation from this normal.

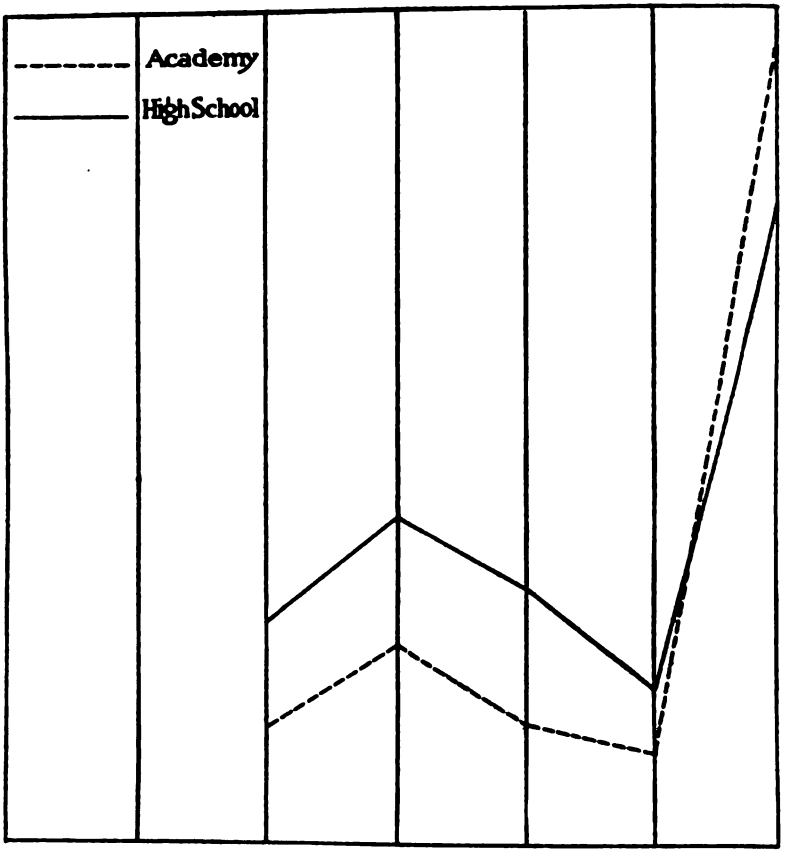

FIG. 5

Assuming any base line upon which as abscissae are laid off the respective honors, we plot the percentages of honors won by the students of each school and also the number of failures (Fig. 5).

Inspection of the graphs reveals the following: In Fig. 1, that

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for the whole follows rather closely the normal distribution curve. In Fig. 2, that for the academy students is "skewed" toward the lower marks, in fact the median student falls within four of C. In Fig. 3, that for the high-school students is "skewed" toward the higher marks, the median being within 20 of being B. Fig. 4 shows that the academy students have far more than their number in the lower and far less than their proportion in the higher quintile divisions. Fig. 5 confirms the results obtained from the previous charts. It expresses the results in percentages of the total number of students in each school. To illustrate: of the 170 academy students whose records were under consideration 21, or 14 per cent, received Junior College honors, while of the 340 high-school students, 88, or 26 per cent, received Junior College honors. The same method was used in determining the other percentages.

CONCLUSIONS

From the foregoing charts and tables the conclusion is evident that as an agency preparing for college the high school is far superior to the academy. Whether this means efficiency or inefficiency on the part of the schools depends entirely upon whether school marks are a test of the efficiency of an educational agency.

In this case, however, it seems that this question is easily settled. For these 510 students, it is evidently a fair test. Judged from the fact that they went to college, for them, at least, the ability to fit for college was the service they asked of their respective preparatory schools.

The results of this study could have been made even more conclusive if it had been possible to determine the relative standings of these students in their respective graduating classes in the preparatory schools. The limits of this study did not permit such an inquiry as would have been necessary to secure such data. Neither were the entering records at the University available to throw light on the character of the preparatory scholarship of these 510 students.

Another investigation, however, could be made which might reveal some further information on the problem. Is it true that the academies send practically all of their graduates to college while

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the high schools send relatively few of theirs? According to the following tables compiled from the national commissioner's reports from 1900 to 1910 inclusive, an affirmative answer can be given. The first table presents the percentages for the United States, and the second table presents the percentages for the North Central states. In each table is first given the percentage of the graduating class of that year of those who have prepared for college and next is given the percentage that these students form of the whole enrolment of pupils in that type of school for the entire country. For

Year	Entire United States				North Central Division			
	High Schools		Academies		High Schools		Academies	
	Class	Total	Class	Total	Class	Total	Class	Total
1900...	30.28	10.82	46.52	31.87	32.02	9.84	34.67	29.20
1901...	31.27	11.15	45.61	33.31	33.87	10.21	40.18	25.15
1902...	31.72	10.66	44.99	24.44	32.30	9.49	35.65	19.03
1903...	32.70	9.82	47.96	23.71	34.20	8.38	34.97	17.16
1904...	34.18	9.54	43.50	21.48	36.56	8.24	33.37	20.95
1905...	35.55	9.48	42.01	18.99	38.48	8.31	32.49	18.47
1906...	35.59	9.13	42.80	17.92	38.59	7.30	35.58	15.22
1907...	32.25	9.59	41.65	25.17	33.88	6.96	37.86	11.03
1908...	32.02	7.88	43.24	27.94	32.99	5.16	36.22	20.43
1909...	34.67	6.02	42.53	19.50	37.49	4.67	36.82	13.55
1910...	33.95	5.57	42.63	16.33	34.63	3.24	37.51	11.27
Totals	334.18	99.66	443.44	260.66	355.01	81.80	365.32	201.46
Average	33.42	9.97	44.34	26.01	35.50	8.18	36.53	20.15

example, in the years 1910, there were enrolled in the high schools of the United States, according to the national commissioner's *Report*, 915,061 students, of whom 51,020 were reported as preparing for college. It is easily seen that the last number is 5.57 per cent of the first; 5.57 accordingly appears in the second column of figures. In the graduating class of 1910 there were 111,363 students. of whom 37,811 had prepared for college. This last number is 33.95 per cent of the first and therefore appears in the first column of figures. The percentages for the academy students were similarly determined as were those for students from the North Central Division.

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WORK OF THE ACADEMY

It is apparent that at present the academy cannot compete with the high school as a college-preparatory institution. The rapid decline in the number of academies makes a change of policy necessary and advisable if the academy is not to disappear. It would seem that several fields are open to the academy in which the high school would not compete:

First, the academy can provide training for students who have been retarded for various reasons and who have lost their place in the high-school classes or who cannot enter them.

Second, the academy can offer courses which the local high school cannot or does not offer. Stenography and typewriting, domestic science and manual training, music, public speaking, business courses, etc., are offered by few high schools. The call for them is loud and widespread. It often happens that the business department of the academy is the only self-supporting department. Moreover, until normal training in high schools is far more common than it is, many would-be teachers would gladly welcome the chance to get their elementary professional training in a near-by academy.

Third, the academy can continue to offer to those who desire it for their children definite training in religion and morals. The reviving interest of all denominations in church schools and in religious education indicates a real opening for this line of work.

Fourth, there will always be a demand for the boarding school with its home life and supervised activities. Some children must be sent away from home, or have no home, or their educational advantages at home are insufficient. These and many other reasons in the future as well as in the past will make a good boarding-school a public benefactor. The number of schools of this type is increasing and they are demonstrating their ability to fill a definite place in the school system of the United States.

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AN EXPERIMENT IN THE TEACHING OF HIGH-SCHOOL COMPOSITION

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One of the greatest obstacles in the teaching of English composition is the lack of suitable material for themes. This is too frequently overlooked by the teachers of English in the assignment of written work. It is not an uncommon practice in many high schools, either to leave the selection of theme subjects almost wholly to the pupils or, when assignments are made, to give such subjects as are listed in the textbooks of composition and rhetoric, which in the large majority of cases are without interest to most of the pupils to whom they are assigned. It is, therefore, not at all surprising to find the interests of the pupils in composition writing in many high schools stagnant, and the work regarded as a dry and lifeless task.

A condition similar to that just described confronted the English department in the high school over which the writer had charge a year ago. The pupils were taking little interest in theme writing and the character of their work was decidedly inferior. In fact, the bimonthly publication of the high school was maintained with the greatest difficulty, owing to the mediocre character of the work handed in for publication. The causes of the indifference on the part of many pupils toward the work were easily ascertained. (1) They had no impelling motives to do well the tasks assigned. (2) Their own repertoire of subjects appeared to be exhausted, and they had no source material from which to draw, when the selection of the theme was left to them.

In order to correct these conditions, the pupils were given the task of gathering the pioneer history of the community in the form of reports on specific topics. The particular form in which these reports were to be written was left to the originality and ingenuity of the pupils; however, they were free to consult the teachers for

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suggestions at any time. The pupils were encouraged to interview the older citizens of the community, to examine monuments and relics, and to consult the county and city records, newspaper files, and printed matter relating to the early history of that particular section of the state. In every case the source of the information was to be acknowledged, and quotations when used were to be properly marked.

The reports covered such general topics as: The Character of the Earliest Settlers; Their Language; Occupations; Modes of Life; Clothing; Amusements; Social Customs; Institutions; The Development of Leading Industries; Notable Historic Undertakings; and Biographies of the Citizens Who Had Contributed Most to the Development of the Community. Out of these general reports, such specific topics as the following were chosen for individual themes: The Nationality of Our Pioneers; A Chat with the Earliest Settler; The Making of a Settlement; Cooking in Pioneer Days; The Spelling Bee; The Husking Bee; The Singing School; Courtship in Pioneer Days; Fashions in Pioneer Times; The District School; The Village Church; A Pioneer Lawsuit; The Digging of the Old Canal; The Building of the First Railroad; Trade Barons of the Early Community, etc.

The pupils took great interest in gathering this material and prepared their reports with care, showing individuality and ingenuity in form, and a marked improvement in expression. The motives underlying the work were both novel and new. They also realized that every piece of work well done would be placed on file in the school library, and would become a contribution to the written history of the community. Furthermore, the reports were to be put to a later use in providing source material for the preparation of a play embodying the community's history and recreating the life of its earliest days. The interests in such material are racial, and make a strong appeal to the imagination of the large majority of pupils. Then too, the work meets with the co-operation of and a ready response from the community, an influence not to be overlooked in securing a high type of work in the school.

After the reports were finished, plots were submitted from various pupils for the historical play. These plots were turned over

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to the pupils of the Senior class, with a view to working out a suitable plot for the type of play to be written. The plots were discussed and criticized and the suggestions were utilized by the class in making a plot that would meet the conditions determined by the material at hand. This was done in round-table discussion, and the play was written in the same manner.

In order that members from all classes might participate in the play and thus maintain the interest of the entire school until the close of the experiment, a cast of forty-two characters was provided, and the assignment of parts was thoroughly representative. The lines were learned with little difficulty, and the play was easily staged, due to the excellent co-operation on the part of the community. When the play was presented the oldest citizens came as the guests of the school, and all agreed that the attempt to recreate the pioneer life of the community in its historical settings had proved a success.

The results of the experiment on the written work of the school and on the relations between the school and the community were most salutary. They may be summarized as follows:

1. The attitude of the pupils toward the English department was radically changed. Instead of looking upon theme writing as a dry and useless task, they regarded it as a pleasure and seemed to understand its purpose in the course of study.

2. In doing this type of work, the pupils seemed to discover a method of work that not only made future writing easier, but also gave them a consciousness of standards of attainment, and a self-confidence in their own ability that resulted in talent apparently latent being brought to the attention of the entire school. This was the inevitable result of learning to do a piece of work well, and clearly shows that one composition thoroughly worked out and conscientiously written is worth more to the pupil than a score simply written in compliance with a class-room rule.

3. In order to awaken compelling motives in the pupils to do high-class written work, a premium was placed on the "worth-while-ness" of the task, and source material was supplied that stimulated the imagination and furnished the suggestions for original ingenious effort. The character of the source material and

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the use to which it was to be put made the realization of this purpose an easy matter.

4. Through co-operative work the pupils found out just what was expected of them. The inquiries and readings, and the class reports furnished them ideas; the previous study of models gave them clear notions of the formal elements of composition, and the suggestions received through their investigations aided them in organizing the material and expressing it in a more acceptable style.

5. The encouragement received from, and the interest manifested by, the community kindled the enthusiasm of the pupils for the work, and caused them to put forth the extra effort essential to high-class workmanship.

6. The participation of all the classes in the presentation of the play, carrying with it the satisfaction of "sharing equally in the spoils," contributed in no small degree to a good spirit between the classes, and to the unification of the English work in the school.

The value of the above experiment is not to be found in the use of local historical material alone, although local history furnishes an interesting and fruitful field for theme work; but in the method of work. Most pupils who are taught to gather facts, and to organize them with reference to a given theme, will have little difficulty with expression. Their motives will grow stronger with successful endeavor, and composition writing will cease to be a burdensome and meaningless task.

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FIRST-YEAR SCIENCE IN ILLINOIS HIGH SCHOOLS

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At the present time there is considerable dissatisfaction with the science work of the high school. This is showing itself in the form of experiments with modified courses, in segregation of the sexes, in the introduction of courses in agriculture and other branches of technology, and, so far as the first year is concerned, by a vigorous movement toward general science. Since the first year is naturally the primary point of attack in any scheme for the revision of the science schedule of the high school, it appeared to be worth while to attempt to ascertain more precisely the actual practice of the schools, at least in one state. The schools of Illinois were chosen for the investigation because of proximity.

In the autumn of 1912 a list of questions was sent to the principals of 417 of the 432 schools which are listed as township high schools and four-year high schools in the *School Directory* for 1911–12, as issued by the Superintendent of Public Instruction. By the kindness of Superintendent F. G. Blair it was possible to inclose with this list of questions a letter from him requesting the cooperation of the school authorities. The total number of reports received as the result of considerable correspondence is 203. The table below shows that the schools reporting include a fairly proportionate representation of schools of all the different sizes. The data secured from them may therefore be regarded as fairly typical of the schools of the state.

TABLE I

SCHOOLS REPLYING COMPARED WITH WHOLE NUMBER OF SCHOOLS IN STATE

Number pupils....	1–25	26–50	51–100	101–200	201–400	401–800	Over 800
Total number of schools.....	34	98	146	73	30	20	16
Number of schools replying.....	8	45	61	35	28	14	12

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The questions were designed to elicit information regarding the science subject or subjects offered in the first year, the training of the teachers, other subjects taught by first-year teachers, and the efficiency of the work. In most cases definite replies were given to all questions although in a few cases certain statements were so unsatisfactory that it was necessary to reject them. As a result of unsatisfactory statements or omissions, the number of replies recorded for each question is less than the whole number of papers returned. The results secured are included in the tables below. The replies appear to have come from the principal in most cases, but in a few schools the matter was apparently turned over to the science teacher.

TABLE II

SCIENCE SUBJECTS ADMINISTERED IN THE FIRST YEAR

SUBJECT	REQUIRED		ELECTIVE		SCHOOLS REPRESENTED	UNITS
	½ Year	1 Year	½ Year	1 Year		
Physiography	40	.....	37	....	77	77
And Physiology	57	.....	20	....		
Physiography	22	.....	10	....	32	32
And Biology, Botany, Zoölogy	22	.....	10	....		
Physiography and Agriculture	.....	.....	.....	1	1	1
Physiography	11	2	3	6	22	15
Geography	.....	3	.....	1	4	4
Botany	2	4	1	1	8	6.5
Zoölogy	1	.....	.....	.....	1	.5
Botany and Zoölogy or Biology	2	5	1	2	10	8.5
General Science	2	4	.....	.....	6	5
General Science	4	.....	1	....	5	5
And another subject	3	.....	2	....		
Physiology	2	.....	2	1	5	3
Broad election permitted, agriculture often included					9	.....
No science in first year					22	.....

In Table II it is shown that physiography and geography appear in the first year, either alone or in combination with other subjects, in 136 schools; physiology is found in 82 schools; and the biological sciences other than physiology are given in 51 cases. General science has been in troduced into the first year in 11 schools and agriculture into the same year in not to exceed 10 schools. The presence of physiology is to be accounted for largely by the requirements of state law and this fact was mentioned in many of the replies.

It is noted that in only three cases (Table III) is the amount of time given to the science work so small as four periods per week. In

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169 out of 180 schools either five or seven periods per week are reported and it may be remarked in passing that the same reports show that the forty-five-minute period is practically universal. One is tempted, however, to question whether the instruction is generally

TABLE III

DISTRIBUTION OF TIME IN SCIENCE CLASSES

TOTAL PERIODS PER WEEK		LABORATORY PERIODS PER WEEK						
Number of Periods	Number of Schools	0	1	2	3	4	10	No Reply
4	3	1	.....	2	.....	.....	.....	.....
5	112	43	22	26	8	1	4	12
6	6	.....	2	4	.....	.....	.....	.....
7	57	.....	.....	6	2	49	.....	.....
8	0	.....	.....	.....	.....	.....	.....	.....
9	0	.....	.....	.....	.....	.....	.....	.....
10	2	.....	.....	.....	.....	.....	.....	2

of truly scientific character when it is noted that the amount of time given to laboratory work is no more than one hour per week in 40.4 per cent of the schools reporting, and that in only 30 per cent of the schools does it reach four periods.

TABLE IV

TRAINING OF TEACHERS BY SCHOOLS

Years in	½	1	2	3	4	5	6	7	8	No Reply	Totals
High school only	....	....	....	....	2	....	....	....	....	1	3
Normal school only	4	3	5	4	6	1	....	....	....	7	30
Normal and college	....	2	1	5	4	4	1	1	....	6	24
College and graduate	3	5	8	1	68	23	3	....	....	12	123

Number with more or less college training..... 147
Number with more or less normal training..... 54

It is obvious that the teachers of first-year science are almost wholly college trained and have usually done work equivalent to that required for the degree of bachelor or master. The college which criticizes the work of the high schools needs to look well to its own record, for apparently the high-school teachers are very much what the colleges make them. The necessity of professional courses for prospective teachers is strongly suggested to the colleges.

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TABLE V

TRAINING OF TEACHERS, BY SUBJECTS

Department	Number		
Physiography		8	
Botany	7		
Zoölogy	2		
Physiology	2		
Biology	32		
Total		43	
Physics	6		
Chemistry	13		
Physics and Chemistry	2		
Total		21	
"Science"		50	
Total science			122
Agriculture	0		
Domestic science	3		
Manual training	1		
Total arts, etc.		4	
Mathematics		10	
Non-science, scattering	8		
Language	15		
Education	2		
Total		25	
Total non-science			39
Total teachers represented			151

It is encouraging to note that the majority of teachers who are giving science instruction are trained in science, but at the same time one is compelled to recognize that very few of them have had their principal training in the sciences which they are teaching to first-year pupils. As against the 136 schools in which physiography is a first-year subject there are but eight teachers who name physiography as the subject in which they have had their principal preparation. There are but two teachers distinctively trained in physiology as against 82 schools offering the subject. It is not our province to suggest the reasons for this other than to call attention to the following table in which are data showing the large number of cases in which a teacher has charge of classes in several different

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subjects. Obviously, one cannot have had his principal preparation in five or six different subjects.

TABLE VI

NUMBER OF SUBJECTS PER TEACHER

Number of Subjects Other than First-Year Science	Teachers
0	9
1	9
2	31
3	40
4	25
5	22
6	13
7	4
8	0
9	2
Total reported	155

Total of teachers handling 3 or more subjects in addition to first-year science.... 106
Percentage with at least 2 additional subjects..... 89
" " " " 3 " " 69
" " " " 4 " " 40
" " " " 5 " " 26

It is frequently asserted that it will be impossible to secure teachers for general science courses because of the breadth of the preparation required. This view can scarcely be held in Illinois since the figures show that the teachers in many schools are actually giving instruction in all or nearly all of the high-school sciences. In some cases non-science subjects are added to the list. The teaching is doubtless inefficient in many of these cases and it might be improved by greater specialization in teaching if this were possible. Such specialization usually is possible only in schools of 400 pupils or more. There are in the state but thirty-six schools of this size and twenty-eight of them are represented in the reports. The fact that these data refer only to the first year does not invalidate conclusions since there are more pupils of this grade than of any other and the opportunity to restrict a teacher's work to a single subject is correspondingly greater. It appears, therefore, that the abundance of small schools will compel the larger number of teachers of science to give instruction in several sciences and frequently to add non-science subjects to their work.

The way out of the difficulty does not lie through greater

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specialization of the teacher's work in the school, for that can be accomplished only in the large schools of urban places. The schools of the villages and smaller towns must remain small on account of the limited school population. The only practical remedy for the situation appears to lie in securing greater breadth of training for the teacher. The tendency of the college is to encourage specialization on the part of its students rather than general training. However, there is need here of some distinction between those who are to go into research and those who are to teach. Specialization is essential to the investigator but it may very easily be carried so far in the case of the prospective secondary-school teacher that he is wholly unfitted for his task. Such unfitness will result not from the acquisition of knowledge in the special line pursued, but from the omission of many other related lines. The average high school has little place for the science teacher who is not prepared to teach any or all of the usual high-school sciences.

TABLE VII

EFFICIENCY CORRELATED WITH PREPARATION OF TEACHER

EFFICIENCY OF THE COURSE	PREPARATION OF TEACHER		
	In Same Science	In Other Science	Non-Science Subject
Satisfied	Per cent 39.9	Per cent 23	Per cent 10.8
With some reservations	37.9	44.5	30
Not satisfied	24.2	32.4	59.2
Number reporting	37 Schools	74 Schools	37 Schools
Total schools reporting above	148		
Total not wholly satisfied	113		
Percentage not wholly satisfied	76.3		

The amount of dissatisfaction with the work of the first year in science is very great. In some cases at least this is to be attributed to the lack of preparation on the part of the teachers, for the dissatisfaction is almost universal in those schools in which this work is in the hands of teachers whose principal interest lies in other directions. Only four of these teachers gave satisfaction. There is, however, much dissatisfaction in those schools where the teachers have been

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trained in the subject or in related sciences. The difference in results secured by teachers trained in the science taught and those secured by teachers principally trained in other sciences is evident but not large. The replies to the questions here involved were commonly made by the principal, though in a few cases it was clear that the matter had been referred to the teacher.

In this connection it is interesting to note the causes for poor results as assigned by reports. These are presented in Table VIII. The sum of the replies does not in this case represent the number of schools replying since many schools gave more than one reason for unsatisfactory results.

TABLE VIII

CAUSES RESPONSIBLE FOR UNSATISFACTORY RESULTS

Time too short	30	
Too much work for teacher	22	
Classes too large	9	
		61
Subject not suited to pupil or pupil not well prepared by lower school	45	
Teacher or teaching	37	
Poor textbooks	10	
		92
Inadequate library	3	
Inadequate equipment	59	
Lack of field and laboratory work	9	
Lack of significance to pupils	2	
		73

The conditions under which the teacher works, the equipment, and the textbooks are charged with responsibility for the failure in 133 of the 226 cases here tabulated. All of these matters are within the control of the school system and in the main demand financial remedies. It is of interest to note that the equipment comes in for more blame than any other single factor, though with an enlightened school sentiment in the community it ought to be the factor most easily dealt with. The teacher does not appear to bear as great burden of responsibility as the correlation of result with training would indicate. It is quite probable that the school officers concerned have not analyzed their problems very deeply and that the satisfaction of the material needs of the schools, such as equipment, would leave the schools very little in advance of their present position.

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FIRST-YEAR WORK IN MODERN LANGUAGES[1]

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There will be nothing radical or revolutionary in this paper. It may be less interesting on that account. Someone has said of Emerson, if I remember rightly, that his biography is somewhat dull, because he never did anything bad or interesting. This discussion applies not to the ideal course such as I should like to see, therefore not to the instruction of children of eight or ten, but to present high-school conditions. When instruction is begun earlier and the course is made properly long, if that comes about, our method will be modified in important particulars. My aim is to render this paper practical; it will therefore treat of things actually done and will name the textbooks used; though it is understood that the same method may be followed with any book suitable for use with beginners.

Importance.—The first year is a most important, if not the most important, year—for it is fundamental. If the proverb "Frisch begonnen, halb gewonnen" applies anywhere, it does to the first instruction in a modern foreign language.

Beginning instruction: general survey.—In beginning French and German I have found it advantageous and effective to work right through a considerable amount of the textbook (grammar) rather rapidly, omitting the exercises from English into the foreign language. This gives the pupil a bird's-eye view of the material to be mastered later—a broader perspective—helping him, I believe, to work more intelligently during the rest of the first year. The pupil acquires a considerable vocabulary, passive and imperfect at first, which is to become active and perfected later. He works less blindly if he is presented this broader outlook, realizing from the first that there are several parts of speech and

[1] A paper read before the Eastern Section of the New York State Modern Language Association at Albany, New York.

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many topics to be studied. If he is kept on one part of speech and drilled on one principle until this is mastered, the progress is slow; he may think for a while that the noun is the whole language; then he leaves the noun, dwells on the verb, and perhaps forgets about the noun; and everything beyond Lesson X or XV (wherever he may be) is as black night. Failing to have a general survey of the ground, he cannot see the forest because of the trees. My practice for two years has been to give the pupil a survey of Part I (39 exercises) in Fraser and Squair's *French Grammar* and of the first 26 lessons (about one-third of the material) in Kayser and Monteser's *Brief German Course*.

Application of principles learned.—Application, which is best brought out in writing the foreign language, is not neglected, but is used in two ways. First, during the first months the reading exercises, especially in German, are copied by the pupil and handed in; mistakes are indicated and papers returned. After a while the pupil becomes proficient in spelling and in noticing endings. This makes a good beginning in the development of accuracy, which is indispensable to efficient progress. Second, after an exercise has been copied, several sentences are dictated. The pupil, having written them correctly once, will come near perfection in writing the same from dictation. Slight changes are gradually introduced in the sentences dictated.

Attention to German or French reading exercises.—One considerable advantage of this method of procedure is that the pupil is compelled to give much time and attention to the reading exercise, which is the model, and, in my opinion, the center of any lesson. Formerly I found this paragraph consistently neglected by many pupils, and for a very natural reason: the exercise is comparatively easy to translate, and so, for a superficial knowledge, requires little attention. When assigned a whole lesson, including the translation from English to the foreign language, the pupils would often attempt the next-to-impossible feat of translating the English into French or German first. Repeated warnings had little effect on some. Their chief aim was to *get something onto paper* to show for their time spent: they wrote *something*—anything but French or German.

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Second view of German and introduction of reader.—This method of procedure brings in considerable reading in the foreign language and translation into English early in the first year. Then by Thanksgiving time a second, slower instruction of the same material is begun, and a reader introduced. The pupil, having already read so much, with the necessary vocabulary furnished in the text-book, will at once take to reading intelligently an easy reader or text. Having a slight familiarity with the various parts of speech, including even some of the irregular verbs, and with some of the idioms and other difficulties, he will not be puzzled at genuinely French and German constructions. Each day's program now consists of some formal grammar and a small amount of reading, oral work, and writing.

Translation from vernacular deferred.—This deferring of translation from the vernacular is indorsed by several authorities, and is nothing new. It is recommended in the introduction of the old Joynes-Meissner grammar (published 1887), from which the following is quoted: "For ordinary purposes the editor would suggest that Part I should be first gone through, with the exercises *from German to English only*, and that all translation from English into German be deferred until the review is begun, and the student is prepared to read an independent text; and, generally, that this independent reading should be begun as early as possible, according to the grade of different classes of pupils." (I paid no attention to this when using the book, years ago, and tried the experiment independently of the suggestion here quoted.) At our last annual meeting (November, 1911) Dr. Sachs recommended deferring such translation as long as possible. Viëtor, as you know, goes so far as to say that translation into the foreign language is a matter that does not concern the elementary course.

Oral work: pronunciation.—Oral work is of the first importance. Pronunciation must, of course, be as near perfect as the teacher can make it. The pupil will pronounce each word in some way or other, and he should learn the correct pronunciation from the first. While phonetics should not become a bugbear, some practical knowledge of the subject is useful for the teacher. You remember that in "Colomba" Miss Lydia had to go to Corsica to learn what

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a prefect is. So I had to go to Paris to learn how to pronounce the common word *oui*, which is not the same as the English "we." Most sounds can be imitated; some need to be described as well; still others need specific direction for their formation, e.g., French *u*, German *ü*. The pupil would better be told that many of the sounds differ slightly or materially from the nearest English sounds. This can most convincingly be demonstrated to an American by showing him how, for example, a Frenchman would pronounce such a word as "lady-bug" (*lédi-beug*) or "George" (*jorj*), using only his nearest native sounds; or by stating that the *th*-sounds in the English "then," "thin," "theater" do not exist in native French or German. The German *au* is not the same as the English *ou:* introducing a German word, and pronouncing it correctly, in the following sentence, will show this: "Go into the *Haus*." From this may readily be seen the mischief done by dictionaries and "self-instructors" which represent the foreign pronunciation by the approximate sound or by the nearest English spelling; such books should have a scientific phonetic transcription.

Sentence-stress, pitch, and intonation also differ in the respective languages; this fact must grow upon the pupil as he hears the teacher speak as a foreigner, provided the teacher has acquired that art. The teacher of French and German should speak his three languages with different intonations. Throughout the course the pupil should *hear* a great deal of French or German; usually spoken slowly, but occasionally at a natural or rapid rate; not enough to discourage him, but sufficient for him to see that there is something ahead for him to aim at.

Oral, leading to written work.—The words of each vocabulary, especially in French, should be pronounced distinctly by the teacher and be repeated by the class. For oral drill the teacher will find it useful from the first to read or speak a whole sentence and to ask a pupil, or several pupils in succession, to repeat verbatim in the foreign language. This is a natural way for the pupil to learn: it is done not only by children but also by foreigners in learning English. The sentences should be short at first and gradually longer ones given. This trains the mind of the pupil to retain phrases, word-groups; is the simplest form of aural and

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oral training; and paves the way for effective work in conversation: the pupil cannot answer intelligently unless he can retain the question until he has answered it. Then add to this the writing of the sentences on the board, after they have been repeated orally. Here we have aural and oral training and practice in spelling and writing—a well-nigh perfect exercise, in its simplest form, of sensory immediately followed by motor activity. At the present time we hear comparatively little of "apperception," while the "formation of correct habits" is the keynote of many an educational convention. Here is the opportunity to form correct habits. During the first stages it is safer to confine attention to the foreign language, provided it is understood by the pupil, to the exclusion of the vernacular. If English sentences are introduced for translation too early, they offer a stumbling-block to the pupil—a temptation to transfer one word at a time into the foreign language, thus producing merely an English sentence written in French or German words—than which there is nothing more exasperating to a teacher who has the proper *Sprachgefühl* and who *hopes* to hear a sentence which will not grate on his nerves.

Written exercises.—Of course, later such translation from English will be introduced. But the teacher must insist that the pupil read the English sentence, or at least a clause, as a whole, and then turn the *whole idea* into a foreign form. Here is necessary the proper realization that the phrase, and not the word, is the unit of the sentence. This grasping of the idea of a whole clause is absolutely necessary in turning English into German, where the order of the elements plays so large a part, and is so difficult for beginners. For instance, a simple declarative sentence may have to be constructed as follows: object, verb (auxiliary), subject, adverbs of time, place, manner, participle, infinitive—inverted in almost every particular from the English standpoint: *Die Aufgabe werde ich morgen früh zu Hause zu Ende gemacht haben.*

Grammar: necessity, amount.—Some knowledge of grammar is to be imparted from the beginning, as already indicated. It is necessary to know the genders and something of the definite article in order to use nouns; the cases in German must be introduced in

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order to understand the structure of a sentence. Individual teachers and textbooks differ as to the order of development of the topics in grammar. But certain it is that the grammatical structure of the foreign sentence is something that is always with us and which we can never shake off, even in advanced classes. I believe strongly, as pointed out above, in imitation and repetition and even in semi-conscious formation of correct habits of speech; but never in thoughtless mimicry or iteration. Constant attention and undying patience are necessary on the part of the teacher in insisting on intelligent use of cases, tenses, prepositions, word-order, etc. If a pupil begins a German sentence with an adverb and then utters the verb next, he must be halted at once; if he starts a subordinate clause with a conjunction and places the verb directly after the subject, he must be stopped and told to keep the verb in mind until the end of the clause is reached. The teacher must ever be alert to raise such danger-signals. Moreover, English-speaking pupils above all others must have impressed upon them, with a sledge-hammer if necessary, the supreme importance of attention to endings. There is always the tendency to learn merely the root-meaning of the word and then to put the words together in English mold so as to express something—or nothing—in French or German.

As to the amount of work done in grammar during the first year, this is less important than the quality. Some of the essentials should be thoroughly drilled in as a foundation for future efficient effort. In German, for example, the common strong verbs can be learned; in French, we may well be content with the mastery of a few of the irregular verbs. We can more safely limit the amount, now that the state education department sets no first-year examinations. This by no means implies that less work is to be done, but that it is to be more intensive. Our own school examinations can be made far more searching and a better criterion as to whether the pupil is to be allowed to go on with our second-year work. Of course, by the end of the second year we must meet the state's requirements; but the latitude allowed for the teacher's individuality in both years is an immense gain.

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The textbook: arrangement of material.—As the modern school has discarded the exclusive use of the grammar method in modern languages, so the up-to-date textbook deviates from the logical or scientific arrangement of material; i.e., exhaustive treatment of the noun before the verb is begun, etc. The most teachable books in German bring in one class of nouns, then one tense of the verb, followed by the *der*-words, one declension of adjectives, a list of prepositions, then more nouns, etc. The weak declension of nouns is better considered before the strong. In the best grammars the verb in its various tenses is introduced early; even some of the strong verbs can easily be studied almost at the beginning. If the teacher uses such a textbook, which may be considered as defective in the organization of its material, he should, toward the end of the first year, furnish his pupils with an outline of topics with their respective section-numbers, and treat one topic in review each day. This not only improves the pupil's extensive survey of the subject, but also increases his intensive mastery of the whole and of the parts in their proper relationship.

Qualities of a good textbook.—In the vocabularies the definite article should be printed before each noun; and the pupil, in reciting, should invariably give the article with the noun. The principal parts of German strong verbs should be given, including the auxiliary with such verbs as take *sein* and the third singular, present indicative when the vowel changes. I am in favor of rather ample vocabularies extending throughout the first-year grammar work, because thus the pupil can learn the greatest number of words in the shortest time, and his later work is much facilitated if he early acquires a considerable stock of words. My experience with a book containing vocabularies of six to ten words to each lesson is that, when the second year is reached, pupils find it very difficult to remember the new words in the reading lesson.

The reading exercise in the grammar has been referred to above as the center of the lesson, because here is a model to imitate. The character of these exercises should, then, be a factor in deciding upon a textbook for adoption. The sentences should be genuinely French or German in tone, and not merely so much ingeniously

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constructed trash or hash to illustrate grammatical points. Connected paragraphs of useful and interesting content are to be preferred. An advantage of such connected paragraphs is that they furnish material for conversation and may be memorized.

English sentences for translation into the foreign language should also be sensible and, if possible, have some worthy content. The following examples of what sentences should not be are chosen from four books: (1) "These are not your pencils, they are those of Henry." (2) "Why has Henry bought a stick?" (3) "The girl who had milked the cows weighed a pound of butter" (light girl!). (4) "Why has the strange gentleman bought your house and not mine?" (Probably because he was strange.) (5) "The weak boy who climbed upon the roof fell into the garden." (6) "He was not dead, because he could howl so loud." (This implies that loud howlers are immortal, which is dangerous ethics.) Too many sentences, in some books, are constructed on the model of the following: "The sons of the prince are talking to the daughters of the lawyer in the garden of the cobbler."

The reader.—As already stated, the reading of connected stories begins early—in the third month. For this purpose my choice is for a reader, in preference to a single text. A story of fifty pages is, to be sure, more interesting for many, and is likely to be better literature. But if the pupil loses interest in the story, as he often will because he must read it so slowly or because he may be absent and lose the thread, the rest of the reading becomes drudgery. Whereas, if one story in a reader becomes dull, he can make a new start with the next and hope to find it more interesting. Furthermore, a greater variety in vocabulary and in kinds of writing is offered by a suitable reader; and this gives a better preparation for future reading as well as for a sight translation on the inevitable examination.

We are using, in first-year French, François and Giroud's *Simple French*, which contains interesting stories in excellent style, and is provided with French questions and with exercises for translation into French. In German, Tuckerman's *Am Anfang* offers a series of short topics, each of which can be assigned as a whole, employing useful words of everyday occurrence. German

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questions are supplied, and answers to these reproduce the whole story. Our present first-year classes are fairly proficient in answering these questions; thus twenty minutes are very profitably spent in using the foreign language, only a few grammatical hints being given in English. Toward the end of the year we shall probably read *Immensee* with the first-year German class, though this is not always done. In reading, as in grammar, the object should not be to cover so many pages—usually too much is attempted—but rather to work intensively with a limited amount. Fifty pages studied are far better than one hundred and fifty scanned or skimmed.

The reader and the inductive method.—On the introduction of a reader in the third month, it goes without saying that the pupil will meet numerous grammatical points which have not been explained in the grammar. Here is an excellent opportunity for the application of the inductive method. Under the careful guidance of the teacher the pupil is to be made to observe endings, cases, word-order, and to make his own rules. Thus, in German, the average pupil will acquire a considerable and practical knowledge of the use of prepositions with their cases, of the comparison of adjectives, of separable prefixes, of future tense and passive voice, of inverted and transposed word-order, much sooner than these topics are treated (or, at least, completed) in the grammar. Also, by being told how, or by looking up in the grammar, he will early learn how to express the date in French or German if he is required to write such date on every dictation-exercise or other written test. A favorite way of mine of compelling attention to common constructions and to idioms is to have the pupil underline endings and phrases which are to receive special study at home and application in class. The phrases are learned in their original forms, and then are changed as to number and tense, thus insuring both correct habit and thoughtful mastery particularly of such constructions as differ from the English. The pupil from the first has it impressed upon him that he must do more than to get the gist of the passage or to translate. Later he may be allowed to give the general idea of a passage in lieu of a strict rendering; but in the first year the reading should be exceedingly careful rather than rapid.

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Method of the recitation: variety.—As to the method of recitation, there should be some variety in the details. Sometimes the pupil may well be asked to begin and recite, without prompting, on the contents of the grammar learned. Oftener the teacher had better first ask some question on a topic not in the lesson, but related: e.g., in French, when the demonstrative pronouns have been assigned, ask for the demonstrative adjectives, which have preceded. This will forestall the machine-like recitation which is all too common; it will call for quick reflection and thought; the pupil will be more alive and awake if he does not know what is coming next. Under my own observation have come too many pupils who were wonderfully adept at "getting lessons" but who could not get the subject. While the chief function of a public high school is not to prepare pupils for college, we should train them to think independently; and should certainly not recommend to the college anyone whose mental horizon is bounded by the confines of one lesson—who does not know a fact because "it is not in the lesson."

In having sentences written on the board, slips may be prepared containing the sentences for translation; more frequently each sentence may be called for orally from a pupil, and then either that pupil or another sent to the board to write it. Dictation is to continue throughout the course, progressing from previously studied material to that which is new. Frequent short written tests, varying in kind, will help to develop attention and accuracy. Pictures, post-cards, maps, and other objects will add to the interest. Occasional memorizing, if done intelligently, is to be recommended. As to the size of the class, it should be small, if possible: fifteen to twenty makes an ideal number.

Study of words: cognates.—Even with beginners it is interesting and useful to notice cognates, and to point out differences in the meanings of some of them. *Das Tier* means "animal," while its cognate "deer" now applies to only one species. Similarly *der Hund* is general, while "hound" refers to a particular kind of *Hund;* "dog" refers to the genus, while the French *dogue* or German *Dogge* is only one species of dog. Interesting comparisons

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may be made between such pairs of words as *Knecht* and "knight," *Knabe* and "knave."

It is wise also to accustom the pupil to the idea that percepts and concepts in one language do not coincide with percepts and concepts in another; or, better, that the connotations of the various words differ from those of the corresponding words in another language; that is, that a French or German word generally has two or more meanings in English, and vice versa. The English word "match" (noun) has (in Gasc's *Concise French Dictionary*) sixteen different renderings into French, according to its particular use. The best vocabularies will give more than one meaning. In specially prepared vocabularies for one text, the primary or most usual meaning of each word should be given first, then the meaning of special application, to fit the particular context.

The teacher.—As to the teacher, the best is none too good for the beginner. If there are several teachers of different abilities in a department, the beginner should have the most capable. This is being realized by the larger colleges, where some years ago the mixed and muddled Freshman had inflicted upon him new, inexperienced instructors. Those of us who have to handle different years of instruction should consider the first-year work worthy of our best efforts. The teacher should be superior to, and a larger factor than, any textbook that may be used; this is particularly true in the first year.

Method: conclusion.—None of the well-known "methods" has been discussed. In the words of a Frenchman: "La méthode n'est rien; l'élève, c'est tout; le maître—est le reste." The teacher will choose from the various methods what is best adapted to his own ability and notions of instruction. Let me repeat that what has been said applied to teaching under conditions as they are now, with pupils from thirteen to seventeen years of age, and in a limited time. We are trying to make progress under these conditions. After the dawn of a brighter tomorrow, with ideal surroundings, we shall be able to start our pupils at once on the road to the perfect mastery of a foreign language.

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EDUCATIONAL NEWS AND EDITORIAL COMMENT

DEALING WITH CONTAGION

The following item quoted from the *Beacon* of Wichita, Kan., illustrates two points. In the first place, a local physician takes the opportunity of helping the community to understand the attitude of the general profession with regard to the prevention as distinguished from the cure of disease. In the second place, the profession has come to see that the control of disease means an intelligent co-operation of the public in the treatment of epidemics. The article is quoted in full both as a good illustration of the proper relation between the medical profession and the general public and also as a very clear account of the intelligent method of dealing in a school system with contagion.

There was a time when the public schools were closed to stop epidemics. Now we have adopted just the opposite method and keep the schools open in order to control epidemics!

This is done through medical inspection!

We have learned that we must watch persons, not things!

Under the old system we closed up the school building and fumigated after having found that there was a scarlet fever case in the place.

By that method we killed some lonely bacillus which may have been lingering around. But we took no heed of, or afforded no protection against, the one scarlet fever scaler who returned to school, bringing with him a million contagious germs in his mouth!

So you see there is a reason for the new way of stopping epidemics. And there is a reason for careful medical inspection and the constant work of trustworthy school nurses.

Every school should have both, if the community hopes to protect its children in the sanest way against epidemics of contagious diseases.

Medical inspection of each child, entering school at the beginning of the year, insures the discovery of cases of contagious disease.

Quite often this inspection will reveal incipient cases which, if treated immediately in the right way, can be cured without serious danger to the patient. It also prevents the disease being passed on to one or several others.

The constant attention of school nurses keeps up the good work through the year. Sore throats, snuffles, rough skin, fevers, headaches, absence from school, and stories of sickness are carefully watched and followed up. And so there is a double check on disease, and it is eventually cornered.

If there is not any medical inspection and the school nurse does not exist,

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the whole problem of keeping the epidemic away is left to the teacher. Though the hardest-worked person in the school system, she can still do much if she will take the added burden upon her.

But it is up to the community of this generation to see that its schools have both medical inspection and school nurses.

What is more important to the public than the sane way of checking disease and insuring health to the children while they are growing up?

VOCATIONAL EDUCATION

Mrs. Young, the superintendent of schools in the city of Chicago, is quoted in the *Times* of Streator, Ill., on August 11, to the following effect:

The great American craze now is vocational schools, of course. We can't see much over and beyond vocational training just now, although, like everything else that the American people take up with such overwhelming enthusiasm, the idea will be dropped just as quickly, leaving, to be sure, its influence, and having merged its best results in the general school curriculum.

I'm convinced the one thing to avoid in vocational schools is the danger of training a type of factory worker. If the schoolroom, with its workbench and its dressmaking and millinery shops, isn't something over and beyond the mere factory workroom, then this whole scheme of trade education will fall and we will have a system of education entirely wrong. The one aim in trade-school development must be to create something of the joy of working in the pupils and develop the most valuable asset in the world—initiative.

There always have been and perhaps there always will be children without any ability to do things of their own volition—without original ideas. But our education now ought to do something besides teaching accuracy and diligence. It should open the door for individual growth. It should show the pupil the way to do for himself. Unless we can put our boys and girls in the way of being something more in life than their parents were, unless we can make it possible for them to advance beyond their environment and the circumstances into which they were born, we are failing utterly.

There are many who will doubtless agree with Mrs. Young that the present enthusiasm for industrial education is not altogether sanely founded upon deliberate consideration and complete knowledge of the needs of children in the schools. To open criticism of the vocational schools by describing such schools as "the great American craze" will seem, however, to many to be an extreme statement of the case. Certainly the demand for such a training in a city like Chicago or the other great centers of population is very urgent and doubtless the demand will continue to express itself until some rational solution is reached. On the other hand, there can be hardly any dissent from the statement that the type of work undertaken in the schools must not be that of the

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factory worker. In emphasizing the necessity of a distinctive type of education in the schools and a careful safeguarding of school institutions against the encroachment of factory methods, Mrs. Young's pronouncement will be very acceptable to many students of the problem.

The Vice-President of the United States, on the other hand, expresses a view with regard to industrial education and a change in the course of study which is no less striking in its emphasis of the failure of present schools than is Mrs. Young's in its criticism of the form which this enthusiasm has taken. The following is a report of a part of Mr. Marshall's speech:

Out of the superior educational advantages of today one unhappy corollary has developed. A vast army of persons whose labors would make for the industrial advancement of the nation have conceived themselves fitted for fancied nobler pursuits, and thus the progress they would have made in the work they are fitted for is lost.

My purpose is to focus attention upon some of the faults in our educational system. Wholly inexcusable is that system which teaches a man to be ashamed of his life-work, which convinces a boy that it is better to live by his wits than his muscles, which turns a natural-born chicken thief into an educated forger.

In the early days of the Republic much book-learning was not possible. Schools and colleges were few. An aristocracy of learning was composed of ministers, doctors, and lawyers. A century has made a great change. Approximately forty thousand degrees were conferred this year and five hundred thousand diplomas were awarded by high schools.

CAUSES DISCONTENT

Thoughtless men believe that the public mind is being agitated by flannel-mouthed anarchists, who wave their red flag, curse God and man, and tear down law and order. This is not the real discontent in America. Our real discontent is being produced by the hundreds and thousands of men and women turned out by our high schools and colleges and thrust by our modern system of education into a modern warfare, with no weapons save those of the ancient crusader.

These educated men and women have been eking out miserable existences in callings which God did not intend they should follow. Their discontent has been increased by the sight of low-browed inferiors, scarcely able to read or write, gathering unto themselves all the good things of life. Unless some way be devised to minister to the wants, physical and mental, of these educated men and women, they sometime will trample under foot all the theories of the Republic in order to reach a better condition of life. Wise men will quit railing at them, quit calling them harsh names, and quit imagining that lurid

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editorials will produce peace; wise men, who genuinely love, as I do, our ancient institutions, will seek remedies consisting of more than invectives.

A DIRECTORY OF APPROVED SECONDARY SCHOOLS

The Bureau of Education has issued a bulletin giving a full list of the schools which are accredited in the different states. This list shows a wide discrepancy between the accrediting of schools by state universities and by the various associations that have been organized to co-operate in accrediting. It is notable, for example, that in the territory of the North Central Association a very large number of schools are accredited in each of the states by the several state universities. Thus Illinois and Indiana accredit a very large number of schools in each of the states, while only a small portion of the total list is recognized by the North Central Association. The various devices that are adopted in different parts of the country in accrediting schools are also indicated in notes attached in each case to the list of any given state. The list will be very useful as the beginning of a systematic study of secondary schools. This list of approved high schools now makes it possible for anyone who is carrying on investigations with regard to teachers or with regard to courses of study to find the addresses to which he would naturally turn for information regarding the work of the typical American high school. It is to be hoped that students of education will see in this list the opportunity of carrying on new and productive researches, so that ultimately the basis of the acceptance of schools will be made very much more uniform throughout the whole country than it now is.

A SCHOOL EXHIBIT

The *School Review* is very glad indeed to give publicity to the following notice and request:

During the late fall and early winter the City Club of Chicago will hold in its club rooms an exhibit of public buildings and grounds for the purpose of stimulating municipalities to make improvements in police stations, streets and alleys, playgrounds, schools, etc. A large space will be devoted to school buildings and grounds and it is the desire of the subcommittee in charge of the school exhibit to secure helpful suggestions from all persons interested in the success of the public schools.

The general purpose is to show the functions of school buildings and grounds and the adequacy of the buildings and grounds for the performance of these functions. Particular attention will be paid to heating, lighting, ventilating, seating, and general care of buildings. All persons interested are asked to send suggestions to William J. Bogan, Chairman, Subcommittee of School Buildings and Grounds.

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IMPROVEMENT IN SOUTHERN COLLEGES

The Bureau of Education has issued the following abstract of the statement given out by Miss Elizabeth Avery Coulton, secretary of the Southern Association of College Women:

In 1900 only three southern colleges had standard requirements for entrance; this year 160 announced standard admission requirements.

Not only in entrance requirements, but also in libraries, laboratories, buildings, and equipment of all kinds, as well as in the extremely important matter of training and ability of the faculty, Miss Coulton notes marked improvement. She attributes the advance chiefly to two agencies, the Carnegie Foundation for the Advancement of Teaching and the General Education Board. The former did its most valuable work through publications which revealed the wide variation in college standards that prevailed in the South, while the latter has been especially helpful through the founding of professorships of secondary education to aid the high schools in their relation to the colleges.

Together with the betterment in entrance requirements has come a decided increase in the amount of college work represented by the degree. In 1904, according to Miss Coulton, the A.B. of only two southern colleges represented four full years of college work, while by 1914 graduates of at least twenty-five colleges will have completed four years of standard college work.

Although emphatic in her declaration that great improvement has taken place, Miss Coulton declares that much still remains to be done. "Each of the 367 institutions in the South bearing the name college or university," she says, "firmly believes that it is predestined to become the leading institution for higher education in its community. Nevertheless, with all the education boards, foundations, associations, commissions, and conferences working directly or indirectly in behalf of the southern college and the development of its efficiency, there remains the hope that many sham colleges may within the next ten or twelve years be induced to stop conferring degrees and become good preparatory or industrial schools; that others may die from lack of patronage; and that the 'righteous remnant' may thus be encouraged to continue to strive after ever enlarging ideals of standard and of service."

SPECIALIZED HIGH-SCHOOL CURRICULA IN AGRICULTURE AND DOMESTIC SCIENCE

The Dunn County School of Agriculture in Wisconsin has provided a four-year course and a two-year course to be taken by students who wish to specialize in agriculture on the one hand or domestic science on the other. The effort to bring together a definite curriculum which will begin with the opening of the school in the Freshman year and continue throughout the four years of the high school indicates very clearly a

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tendency which is common in high schools throughout the country, namely, the tendency to set up a curriculum as distinguished from a series of elective courses. This particular group of courses is also interesting as indicating the tendency to eliminate very largely the so-called academic subjects and replace these by other subjects. Finally, the course is of interest as indicating a specialization of work for the girls and boys in the school. The following statement copied from the *Menomonie News* gives a full account of one of the curricula, namely that covering four years. The two-year curriculum is somewhat more intensely specialized from the beginning along agricultural and domestic science lines.

Many of the boys and girls today want a high-school education but do not want a maximum amount of academic work and a minimum of practical work. With this idea in mind the Dunn County School of Agriculture is giving the following courses:

FOUR-YEAR COURSES

FIRST YEAR

Boys—English (5); Algebra (5); Botany (Agricultural) (5); Farm Crops (5); Manual Training (2½).

Girls—English (5); Algebra (5); Botany (Agricultural) (5); Sewing (2); Food Study (3).

SECOND YEAR

Boys—English (5); Geometry (5); Zoölogy and Physiology (Ag.) (5); Animal Husbandry (5); Manual Training (2½).

Girls—English (5); Geometry (5); Zoölogy and Physiology (Ag.) (5); 1st Sem.—Cookery (5); 2nd Sem.—Bacteriology and Home Sanitation (2); Cookery (4) (2 hours Lab.); Sewing (4).

THIRD YEAR

Boys—English (5); English History (5); Physics (Agricultural) (5); Farm Mechanics (5); Manual Training (2½)

Girls—English (5); English History (5); Physics (5); 1st Sem.—Dressmaking (3) (1–3 hour Lab.); Textiles (2); 2d Sem.—Home Management (3) (1–1 hour class) (1–2 hour Lab.); Millinery (2)½(2–1 hour Lab.).

FOURTH YEAR

Boys—English (5); American History and Civil Gov. (5); Chemistry (Agricultural) (5); Soils (5); Manual Training (2½).

Girls—English (5); American History and Civil Gov. (5); Chemistry (5); 1st Sem.—Foods and Adulterations (2); Dietetics (3); 2d Sem.—Home Nursing (2); Home Decoration (3).

The numbers after the above subjects indicate the number of 40-minute recitations per week. One 5-hour subject for the year counts as one credit.

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INSTRUCTION BY CITIZENS

Kansas continues to make educational history through its new state board of education, as indicated in the following item clipped from the *Journal* of Topeka:

Believing that there is a lamentable lack of general information on the live topics of the day and the ups and downs in business life, among the students of the state institutions, the board of administration after a recent session in Topeka has decided to introduce in the schools a new course, beginning with the fall terms. The course will consist of lectures by well-known business and professional men from over the state, and the students of both sexes will be required to attend.

The new administration board has taken a peek at the practical side of the state's education of young men and women. The board insists that there is something else in a college education besides Latin, Greek, mathematics, chemistry, and football. It believes that the average man and woman who graduates from a state institution is anxious to make a success in life. This success, the board thinks, is due in a great measure to the general knowledge of the advantages and disadvantages of the different vocations in the business world.

Hence, the new lecture course requirement in the state institutions this fall.

HEAR FROM SUCCESSFUL MEN

The board of administration has an idea that a man who acquires a specialty of language and literature and classics in the university, for instance, should look around for his favorite vocation through contact with men who have made a success along this line.

If Willie Williams went to K.U. and matriculated in the journalism department with a trimming of the classics, the languages, and a dab at art, Willie would not be a fit candidate for a farmer, banker, or hardware dealer. In the same breath, Willie's brother, John, goes to K.S.A.C. and is sent through the agricultural courses with an insight into engineering. John, the board declares, isn't the man to dive into the game of journalism.

Procure eminent speakers from the newspaper, banking, farming, and engineering ranks, give them a subject which deals with the application of the young man to the profession, and deal out the information right from the shoulder—that is the plan of the three state officers in charge of the educational institutions.

"We are planning to give the students the bright and dark sides of the various vocations," said President Hackney of the Board of Administration. "We want them to understand something about the relative advantages or disadvantages of each and the requirements for success in each. With that in view, we will have a series of lectures by men who have been successful in their various occupations. These lecturers will be requested to point out to the

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students the requirements for entering the vocations. We want students to enter a profession intelligently, not blindly.

"This will tend to more efficiency and will give young people an idea of the supply and demand in the various fields of endeavor.

"The students of both sexes will be required to attend these lectures, for the board feels that a girl should have some conception of the difficulties and possibilities and advantages of the profession to which her husband may belong."

COEDUCATION AND SEGREGATION

The problem of coeducation apparently is not entirely solved. A number of schools, as reported in a pamphlet issued by the Bureau of Education entitled *Special Features in City School Systems*, are undertaking to solve the problem by a form of separation of the boys and the girls in the upper grades of the elementary school and of the high school. The following selected paragraphs may be quoted from the Bureau's report:

MARINETTE, WIS. G. H. Landgraf, superintendent of city schools.—Last fall a plan was begun for the segregation of sexes in the physics and chemistry classes, modifying the courses to suit the particular needs of the classes, and in physics using different texts for the sexes. The course in physics given to the girls' classes is largely informational and cultural and less technical. On the other hand, the boys' courses are more technical and mathematical and look toward fitting the boys to take scientific and engineering courses in the colleges and universities, and in fitting them to apply their knowledge of technical physics in the arts and industries. In chemistry the same principle governs the differentiation of the work. The chemistry of the girls' classes is built up largely around the chemistry of the home, of cooking, food values, and adulterations and their detection, while that of the boys' classes is like that of physics, more technical and "scientific," calculated to be of most service to them in higher institutions and in the arts and crafts.

Experience in the limited tentative trial of the plan seems to demonstrate its value to all concerned and has resulted in greater enthusiasm and better work in each section. It is thought also that its success points the way to profitable segregation and differentiation of secondary school work in other subjects, as biology, English, and mathematics.

EVERETT, WASH. C. R. Frazier, superintendent of city schools.—In September, 1912, the boys and girls were separated for class work in the greater part of the high-school work. Beginning with February, 1913, the eighth-grade pupils (all of whom are now gathered at the central building) were also segregated into boys' classes and girls' classes for all of their work. This step, with reference both to the high school and to the eighth grade, has been taken in the belief that there is enough difference in the way the minds of

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boys and girls attack a subject to classify them separately. Teachers find themselves presenting subject-matter in a different way to a class of boys than to a class of girls. So far the testimony of the teachers has been favorable to the segregation in this respect. It is thought to be much better to have the boys and girls separated in the grammar- and high-school grades for the reason that this is just the stage when boys and girls are apt to become too conscious of the attractions of the opposite sex. This plan also facilitates the classification of pupils for their industrial work.

SECRET SOCIETIES

With the opening of high schools the ever-present question of secret societies again comes to the front. A typical statement of the case is to be found in the *Beacon* of Wichita, Kan.

Secret societies in Wichita are unusually active this summer in spite of the severe jolt they received last year from the school board. The sororities are pledging new members. The fraternities have had several initiations. There have been many sorority and fraternity picnics given openly and participated in by high-school pupils.

Every high-school pupil last year signed a pledge that he or she would not participate in secret societies or their activities. Members of secret organizations say the pledge was not binding during the vacation time.

The Board of Education has not said anything relative to its approval or disapproval of the secret societies during the summer. The board is not in favor of these organizations because of the cliques they create among pupils.

The board will enforce the pledge law again at the beginning of school for the benefit of the Freshmen who have not signed it. Violators of the pledge are liable to suspension from school. All fraternity and sorority activity must cease before high school opens or stringent rules will be enforced.

The statement that is here made could be repeated for many different parts of the country. In the meantime it is interesting to note that the college fraternities see the significance of this whole matter and are attempting to deal in some prohibitive way with the organizations in high schools. The question of secret societies had been before several state legislatures of late and has taken the general form of a question of the propriety of such organizations in the state universities as well as the public high schools. Unless these organizations can be controlled by the ordinary methods of school administration it is not at all unlikely that effective measures will be found in some of the devices that are now being adopted to terminate the evil of such secret societies. One of the best ways undoubtedly is that which attempts something more than mere suppression of these societies. Mr. Davis of the high school at Grand Rapids, Mich., is preparing an elaborate statement of the devices which

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he has frequently discussed and described in his articles on giving the boys and girls in the high school so much to do of a good and productive type that they have no time or energy for the organization of secret societies which are inimical to the interests of the school as a whole.

SCHOOL HYGIENE

The Fourth International Congress on School Hygiene held at Buffalo, N.Y., August 25–30, was an affair of more than ordinary interest. It brought together hundreds of delegates from every civilized country on the globe. In an impressive way it emphasized the increasing importance of the conservation of the child's health. Half a dozen simultaneous sections were running morning and afternoon throughout the week; general meetings at night were addressed by men of international repute, and a continuous exhibit was made of the work being accomplished by schools, cities, and sundry societies for the health of children. The mere titles of papers with the names of those presenting them occupied over fifty pages of ordinary book size in the official program.

The following general subjects to which one or more sessions were devoted will give some idea of the scope of the Congress: School Buildings and Their Equipment; Fatigue and Nervousness in School Children; The Exciting and Contributory Causes of Disease and Physical Defects in School Children; Symposium on Child Labor; Open-Air Schools; Instruction in Hygiene; Mouth Hygiene; The Ventilating, Heating, and Cleaning of School Buildings; Mental Hygiene and the Hygiene of the Mentally Abnormal Child; Oral Hygiene; Sex Hygiene; Medical Inspection; Play and Athletics; Physical Education; The Conservation of Vision; School Feeding; School Illumination; Tuberculosis among School Children; School Nurses and Clinics; etc., etc.

Dr. F. P. Lewis, president of the American Association for the Conservation of Vision, said in part:

> Near sight starts primarily as the result of strain of the eyes, and it is not an accidental occurrence. It develops and increases during the school period until at maturity more than one-quarter of the school population is nearsighted. Notwithstanding this fact, there is no modification in the rigid curriculum of our schools for pupils having eyes so affected, and we have as a result the development of a condition which predisposes to other and later destructive changes in the eyes.
>
> The remedies are obvious. First, the correction of the focal defect at the earliest possible opportunity; second, near work, such as reading and writing, must cease. Happily the training of the mind and the development of the

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brain can be carried on as effectively if not more so without the use of books for study than with them.

Book study is convenient but not essential. In looking on the printed page we often see without thinking. The child should learn to think without seeing. Teaching from the concrete object, the use of pictures, the developed sense of touch, and of smell bring into play various parts of the brain through the association fibers, and lead to more clear, exact, and rapid thinking, than where the student is obliged to interpret the symbols employed in the printed page and which require an added mental effort for their understanding. It is, therefore, good pedagogy to use books less.

All children in whom near sight is beginning should be segregated into special classes. The same curriculum could be employed as for the others of the same class, but for these book study should be replaced by oral graphic illustration and other methods of study. In this way and in this way only the development of progressive near sight in school children can be arrested.

Although the exhibit of the American Federation of Sex Hygiene was only one out of nearly a hundred exhibits in the Great Broadway Auditorium, yet one might be quite sure of finding a quarter of the crowd present studying this exhibit. Dr. Charles W. Eliot, president of the Congress, spoke in behalf of sex instruction, in part as follows:

The attack must be made against the three principal causes of the present evil conditions—first, lust in men; second, the mental deficiency and lack of moral principle of the women who supply the demands of men; and third, the greed and depravity of the wretches who maintain a profitable commerce out of the traffic.

Defensive agencies against lust include full occupation of mind and body, manly sports, ambition and energy in the earning of a livelihood, timely knowledge, temperance in food and drink, and deliverance from mischievous transmitted belief. The best source of information is the parent, but schools, churches and other social agencies must be utilized. The public press must aid. It must be made impossible for either young men or young women to plead ignorance as an excuse. It is not likely that any short or easy road can be found to the redemption from licentiousness of males. There is, therefore, all the more reason for entering at once on the best roads to be found that lead in the desired direction.

Commercialized vice should be attacked in all its forms by all the powers of law. The ancient policies of toleration and licensed segregation and regulation must be uprooted. Segregation nowhere has been successful, even in Japan, where it has existed for centuries.

The laws against undesirable marriages need to be revised and the public must be convinced that no law can eradicate the evil. Laws must provide that candidates for marriage shall be free from disease and proper provision must be

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made for the certificate to that effect to come from a trustworthy physician appointed by the state.

Public progress in regard to sex hygiene and eugenics is to be procured chiefly through educational methods. The work must be done delicately, without morbid suggestion, without interference with parental rights, or religious convictions, and in general, in a pure, high-minded, disinterested way. The pioneering, voluntary association should enlist gradually the public authorities in this vast undertaking and transfer to the public the support of those parts of the work that prove to be sure and permanent public advantages.

Rev. J. Tierney of Woodstock College would eliminate the details of sex hygiene in the public school instruction and

train character, teach that purity is noble and possible, that vice is vile and carries its own punishment, that marriage is inviolate, and that the family is sacred.

Teach boys that their bodies are vessels of honor, the habitation of a soul made in the image of God; train them to reverence womanhood and to venerate motherhood. Teach girls reserve, modesty of manner and dress, purity and self-sacrifice. Carry your campaign further. Purge the press, cleanse the novel, elevate the theater, abolish animal dances, and frown on co-education after the age of puberty. Labor that all men may realize the great obligation of life, which is to know God and do his behests.

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BOOK REVIEWS

Materials and Construction. By JAMES A. PRATT, Director of the Williamson Free School of Mechanical Trades. Philadelphia: P. Blakiston's Son & Co., 1913. Pp. xi+196. $0.90 net.

Syllabus of a Course on Elementary Woodworking. By WILLIAM NOYES, Assistant Professor of Industrial Arts. New York: Teachers College, Columbia University, 1910. $0.30.

Manual Arts for Vocational Ends. By FRED D. CRAWSHAW, Professor of Manual Arts, University of Wisconsin. Peoria, Ill.: Manual Arts Press, 1913. Pp. 99. $0.85.

Here are three books, all worthy of a place in the library of anyone who is trying to keep up with the development of the manual arts in education. There is no special reason for noticing them together, however, as each has its own distinct field. The first named, by a practical and successful trade-school man, is an attempt to make available for the young student an introduction to the elementary laws of construction, and to assist him in gaining facility in the application of simple formulas. There is no entering into the field of advanced engineering work, the scope of the book being restricted to a treatment of the essentials in the preparation of the young mechanic. There is considerable variety in engravings, as to quality of workmanship, some of them being reproduced from carefully dimensioned drawings and others from rough freehand sketches. The object in using the latter is to accustom the young worker to handle and work from sketches of the kind he must frequently meet when out on the job. The problems are well selected, and the descriptive matter sufficient for the purpose, with frequent references to larger works. The tables are collected at the end of the book for convenience of reference.

The author of the *Syllabus of a Course in Woodworking* believes that such a course should assist the student in three main directions: (1) acquisition of skill in the handling of woodworking tools; (2) practice in designing simple projects in wood; (3) insight into the methods and problems of woodwork in the manual training shop. This syllabus presents an outline of the steps to be followed in working toward the first of these aims.

The book consists primarily of a working outline, or lesson plan, for each of ten projects suitable for the school shop. There are numerous excellent drawings and sketches, so that the processes are well illustrated. The treatment should be especially helpful to the young teacher, and cannot fail to be productive of improvement, not only in technique, but in teaching methods.

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Professor Crawshaw's book is written for the student of the modern vocational-education movement. The topics discussed are: Relation between Manual Training and Industrial Education; Organization of the Manual Arts; the Manual Arts in the Elementary Grades; in the Grammar Grades; in the High School; the Teacher and the Supervisor of the Manual Arts.

The author summarizes for the reader the discussion that has been going on in recent years, and states clearly and concisely the principles underlying the best recent thought in this field. It is a good book for superintendents to read, as well as supervisors and directors of manual arts work, and for use as a text in a class for the training of teachers.

WILLIAM T. BAWDEN

TEACHERS COLLEGE
NEW YORK

Syllabus of a Course of Study on the History and Principles of Education. By PAUL MONROE. New York: Macmillan, 1911. Pp. v+87. $0.25.

This little syllabus, bearing the name of the leading American authority on the history of education, will prove most useful to the general student and the specialist in education alike. In its outlines it follows closely the point of view and content that appear in Professor Monroe's *Textbook*, and displays most of the merits and defects of that standard work. In the main the source and references are well chosen, but the usefulness of the work would be greatly increased if a brief evaluation of each were given. It would also be of assistance if the initials of the author, the name of the publisher, the place of publication, and the date were given in each case. Most of the misprints, with which this book fairly bristled in its chrysalis stage, when privately published, have been eliminated, but there are still some remaining.

Outlines of the History of Education. By WILLIAM B. ASPINWALL. New York: Macmillan, 1912. Pp. xvi+195. $0.80.

This book represents a more serviceable body of material than would be indicated by "the evolution of different philosophies of education" and "the writings of the educational philosophers of the world," claimed in the Introduction. While it is possible that relatively too much space is given to antiquity, the Middle Ages, and a few of the theorists, the book lays considerable emphasis upon educational practices, and devotes the last five sections to most practical subjects—Public Elementary Education, Secondary Education, Training of Teachers, Modern School Systems, and the History of Education in New York. The references are entirely to secondary sources, mostly textbooks, but are usually well selected, and possibly more available and valuable for the normal-school student than primary sources and special works would be.

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But the author has not discovered how useless the literature of the Draper-Martin controversy (p. 180) has been shown to be by Kilpatrick. The book is well printed, has been carefully proof-read, and has an excellent index.

FRANK P. GRAVES

OHIO STATE UNIVERSITY

An Industrial History of the American People. By J. R. H. MOORE. New York: Macmillan, 1913. Pp. xiii+495. $1.25. Accompanied by a Teacher's Manual, pp. 32.

Mr. Moore's book is more elementary than Miss Coman's, being intended for high schools only. It contains a much smaller amount of industrial fact, partly owing to selection, and partly to reasons which will be noted below. The first impression that the book gives is of immaturity. This is difficult to illustrate briefly, but is suggested by such generalizations as: "[Louis XIV] succeeded only in injuring France, with the result that France today is one of the most backward of civilized nations" (p. 88); "It seems as though some mysterious natural law impelled all the colonies alike to raise or produce the things best suited to the soil and climate of their locality" (p. 145); "That mysterious provision of nature that sends large families to settlers in new countries" (p. 160); "Another curious custom among cotton planters had to do with the market price of slaves. This price was commonly regulated by the price of slaves in the region where the demand was greatest" (p. 302).

The book is not a history in the sense of an exposition of a development, but a series of chapter essays on Fisheries, Lumber, Fur Trade, Domestic Problem, Agriculture, Commerce and Money Matters in Colonial Days, Colonial Government, City Problem in the United States, Agriculture in the Nineteenth Century, the Money Question, Manufacturing in the Nineteenth Century, Transportation in the Nineteenth Century. Although there is some chronological progression, the first chapter ends with 1912, the last begins with the first landing of the English. The colonial period is given too large a share of attention—242 pages out of 491. Mr. Moore does not seem to have a clear conception of what constitutes industrial history, and much extraneous information is given; for instance, chap. viii, pp. 209 to 255, on "Colonial Government," had much better have been omitted with practically all it contains.

More serious than the inclusions, are the omissions, of which only a few can be cited. Mr. Moore almost entirely fails to grasp any vital connection between geography and industry; he does not discuss the mining industry, or labor unions, he fails utterly to give any conception of the progress of agriculture in the United States. In greater particularity, in connection with fishing, he does not mention the trade with Spain, whaling, the growth of the internal demand for fish, reciprocity with Canada; in the chapter on lumber he entirely omits the period between 1704 and the conservation movement;

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in the chapters on finance he does not refer to the debt and mortgage side of the problem.

Mr. Moore's point of view is what ten years ago might have been described as conventional. He is anti-English, anti-southern, and non-western. The descriptions of England are almost fantastic, the industrial history of the South since the War is given in a single paragraph (pp. 342–43), which does not mention the share system, the crop lien, or manufacturing; the only feature of the land system discussed is the homestead law.

Positive errors are not so much in evidence as loose statements. Probably Mr. Moore does not mean that the treaty of Ghent did away with the fishing clauses of that of 1783, although he seems to say so (p. 30); he can scarcely believe that illegal colonial trade exceeded the legal (p. 196), or that the assets of the government in 1789 included "about twenty-five million dollars in debts" (p. 354), or that nine-tenths of the wealth of the South consisted of slaves (p. 318). On p. 183 he should have explained that "Englishmen" in the navigation acts included colonists. The index is inadequate.

The book makes it evident that Mr. Moore is a brilliant and suggestive teacher, and it is upon this fact that its merits rest. While few industrial problems are grouped in their fundamental aspects, those phases of them which are presented, consisting chiefly of the questions arising when industrial facts have become the subject of political discussion, are clearly and interestingly treated. The ordinary high-school student would undoubtedly gain from the book, properly taught, definite views of a number of important and difficult questions, particularly those of banking and currency, and the tariff.

C. R. FISH

UNIVERSITY OF WISCONSIN

Youth and The Race. A Study in the Psychology of Adolescence. By EDGAR JAMES SWIFT. New York: Scribner, 1912. Pp. x+342.

This book presents in popular, readable style numerous illustrations of typical experiences of adolescent boys and girls. It shows how the training and discipline of the school should utilize the instinctive forces of child nature. It contains many protests against, almost condemnations of, tradition and conventionality in education. It will be a helpful and stimulating book to teachers and students of educational problems.

Chap. i, "The Spirit of Adventure," cites examples of boys, and also of girls, breaking away from home and school to satisfy their desire for adventure. This craving should be utilized in legitimate and educative ways "without encouraging reversion to the primitive, ancestral type."

Chap. ii, "The Ways of Youth," gives an extensive discussion and numerous illustrations of successful pupil-government. It shows the beneficial effect of discipline upon the reduction of tardiness, absences, and truancy. Pupil-government is organized on the same plan as a city government with a mayor,

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alderman, commissioners, etc. The author argues for it very strongly. In some instances an efficient organization of pupils has appealed successfully to the city authorities for the improvement of the streets and grounds near the school building.

Chap. iii, "The Chance to Grow," discusses physiological adaptation in animals, the prevalence of physical and sensory defects and their effect upon school work, the prevalence and injurious results of insufficient food, and the excellent results of the introduction of playgrounds. "In Saint Louis the police reports have shown a decrease of 50 per cent in juvenile crime in the neighborhood of playgrounds during the summer months when they were open." (p. 104).

Chap. iv, "The School and the Community," deals with elimination and truancy in school. Swift advocates trade instruction, better teachers, and fewer pupils per teacher. He recommends the establishment of social centers and points out their good effects upon the community.

Chap. v, "Vagaries of the School": Our care of backward children, of the deaf and the blind is better than our care of the normal and the bright children. The chapter gives a drastic criticism of the public schools for not adopting the ideas and methods of "republics." "But the view that education is more than instruction, that every child has personal characteristics which make him a special problem, and that complete development is possible only when these individual qualities are discovered by the teacher and utilized for growth, has been accepted only in principle even for incorrigibles, for junior republics are still so few that many boys are turned away." The school does not take sufficient account of individual ability and progress. The bright pupil should receive as much attention as the backward pupil, and should have opportunity to advance as rapidly as possible. The author's criticism of the conservatism and conventionality in the administration of our schools is perhaps overemphasized. While the conditions as described actually exist in many instances, we ought not to overlook the real steps of progress and the real efforts that are being made to adapt the schools to the best interests of the youth and the race.

Chap. vi, "Fallacies in Moral Training," deplores the separation of the mental from the moral in development and points to self-government and honor systems as means for instilling moral ideas.

Chap. vii, "The Spirit of the Gang," relates numerous concrete illustrations of boys' organizations, their moral codes, forms of punishment, etc. The teacher should secure the sympathy and co-operation of the gang, so that the boys will assume an attitude of helpfulness, rather than opposition to the school. In many instances boys' gangs have been instrumental in suppressing lawlessness and rowdyism. "Making children feel that the work is theirs and not the teacher's means, then, securing attention. This the schools have failed to do, and as a result teachers are continuously working against the resistance of the group consciousness" (p. 284).

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The last chapter, "The Release of Mental Forces," discusses and illustrates with examples from the studies of animal behavior the proposition that the more highly developed the animal is, the greater is the flexibility of response to stimuli. The author emphasizes the breaking away from customary methods of teaching and encourages originality in linking up school life with practical life.

The book is vigorous, full of suggestions and practical illustrations, and commends itself to all who are interested in present day education.

DANIEL STARCH

UNIVERSITY OF WISCONSIN

Great Educators of Three Centuries: Their Work and Its Influence on Modern Education. By FRANK PIERREPONT GRAVES. New York: Macmillan, 1912. Pp. ix+289. $1.10.

The great educators that Professor Graves has treated in this book are Milton, Bacon, Ratich, Comenius, Locke, Francke, Rousseau, Basedow, Pestalozzi, Herbart, Froebel, Lancaster and Bell, and Spencer. The order of treatment is as given above. With the exception of Milton who is treated first, the order is chronological. This order seems to be used for the purpose of tracing the influence one educator has on those of succeeding generations.

Professor Graves has made some attempt to present the social setting of each reformer as well as to give a few facts pertaining to his life and his contributions to education in general. In the first he has but partially succeeded. The general reader for whom the book seems to be written will understand little of the social and economic conditions of Europe in the time of Rousseau and Pestalozzi from a reading of the author's discussion of these two educators. The chief emphasis in each case is placed on the educator's works and their probable influence on his successors. In a few cases some emphasis is placed on the life of the educator.

One hundred fifty pages are devoted to four of the educators, Rousseau, Pestalozzi, Froebel, and Herbart; and the remaining pages which are less than half of the book, to the other eleven. To give so much space to four makes the treatment of many others rather scant—not as much as some of them seem to deserve, even when their influence is compared to any of the four more fully treated.

The author's style is very fascinating and with few exceptions (the treatment of Locke for one) the reader's interest is rather intense. Anyone desiring a popular and non-technical treatment of the educators of the last three centuries will find it in this book. He will get a rather complete treatment of four of them and a somewhat extended introduction to the remainder.

In general the book is of the same type as Quick's *Educational Reformers* and Hoyt's *Studies in the History of Education.* The former treats most of the same educators with others added; the latter, some of the same, but fewer

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in all. In any book of the type of these the difficult thing is to maintain a thread of connection throughout. None of the above books maintains such a thread of connection. They are somewhat like a dictionary of biography and are more useful as reference material than as texts giving a connected discussion of the history of education.

R. M. TRYON

Sources of Interest in High-School English. By JONES.

This book by Mr. Jones is the most careful and comprehensive on the subject of school English yet published. A very great amount of work has gone into its making, and some very interesting results are now exhibited.

Those who are interested in tabulated data and comparative curves in the scientific spirit of the day will have their desires well satisfied. For ourselves, we confess to more interest in the author's deductions from his investigations. And there are sensational deductions although the book is by no means written in a sensational spirit.

We are sorry Mr. Jones did not complete his study by including the fourth year of the high school. There would be then a certain completeness which is now lacking. But within the limits set for himself, he has done his work excellently well.

Mr. Jones brings out very clearly one point upon which there will be a chorus of approbation by English teachers in general —that the essay has no place in high-school work. "Appreciation of an essay requires knowledge of literary style and does not depend on either plot or personality." At the high-school age pupils are interested almost wholly in plot and personality, in the order mentioned. In the first year there should be plenty of stories of action—*Ivanhoe* is popular; nobody mentions *Cranford* with approval. It is no use to force the child to read books fit only for mature persons. Beginning with a strong interest in plot, the pupil goes on to interest in character, and finally to an appreciation of what might be called a combination of the two—the drama. Here is reason for the present movement in many schools toward teaching the modern drama.

One of the most interesting observations and one of the sensational is that the study of biology and the study of history apparently affect the pupil's reading not at all. This is a serious indictment against biology and history as now taught. Surely the study of biology should stimulate the pupil to read more of the life about him. We wonder if the textbooks and the teaching are not too "scientific" and formal, with the life squeezed out. More amazing still is the information that the study of history leaves the pupil with no desire to read. It leaves him cold in the presence of one of the mightiest branches of literature and perhaps the mightiest teacher of life. And yet history is so alive! What is the good of teaching that leaves no glow behind, be it ever so scientific and modern?

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Mr. Jones finds, also, that biography has no interest for children of high-school age. There are some of us who will regret this lack of interest in a fascinating department of literature and may not wish to accept the conclusion as final. If there be truth in the charge, however, there is at once brought up the question of teaching the formal history of literature which is almost entirely biographical. We doubt the value of such courses, except as purely supplementary to reading already done.

A curious omission, to one who knows the reading of boys, is that Mr. Jones makes no mention of the dime novel in the lists of outside reading. An interesting chapter could be added to such a book on the amount of such reading by the high-school Freshman and its increase or decrease in the following years of the high-school course, with the probable relation to such increase or decrease played by the English course. By such a study a good test would be made of the value of the classics in training the mind away from the cheap and unreal in writing.

Teachers of history and biology should do some worrying when they read this book. Teachers of English and all those who are concerned with courses of reading for schools can get most valuable information from it.

J. A. WALLACE

MEDWAY, MASS.

Readings in English Prose of the Eighteenth Century. Edited by RAYMOND MACDONALD ALDEN. Boston: Houghton Mifflin Co., 1911. $2.25.

Professor Alden's book of selections from the prose of the eighteenth century is intended to furnish the necessary prose reading for college courses in the history of the English literature of the period. It provides no inconsiderable body of matter from each of the half-dozen authors regarded by the editor as most important—from Addison, Johnson, or Burke, for example. The purpose is not merely to give characteristic specimens of the style of these writers, but to leave an impression of their ways of thought and their subjects, in substantial bulk, so that the student may conceive of them as solid realities, not as thin abstractions of applied rhetoric. In the case of less important authors, such as Bolingbroke and Godwin, the extracts are briefer, and merely exemplify the temper and the literary manner of the writer from whom they are drawn. The great novelists, likewise, because of the restrictions of space, are represented merely as stylists. There are some extracts from the professed critics of the century, such as Dennis, Hurd, and the brothers Warton, chosen to represent the tendencies and topics of conscious reflection on literary themes. The figure of Johnson bulks largest in the book, as in the mind of his time. The selections constitute a fair representation of the age, except for one great omission; namely, that there is nothing in the book from John Wesley's Journal, and in general nothing to represent the evangelical revival

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of the later eighteenth century. In a work which includes a fair exhibition of the characteristic romantic criticism of the period from 1750 to 1765, and a passage from Godwin's *Political Justice* because it illustrates "the spirit of 1789," the failure even to refer to the religious aspect of the general eighteenth-century expansion indicates a view of the literary tendencies of the century which is gravely out of balance. Allowing for the neglect of this important theme, the selections evince openness of mind, soundness of judgment, and a fresh and sincere view of the authors at first hand. Steele's melodramatic narratives with piteous endings seem to the present writer too characteristic to be entirely omitted, and some of Goldsmith's comments on weeping comedy appear to him as important "documents" as the manifestos of romantic criticism. But these are small points. The book as a whole is well done, if we accept its point of view.

The questions that rise in the present writer's mind are not about details, but about the conception of the work. The book is well done; but ought it to have been done at all? The sample-package method of teaching literature, though a practical necessity at some stages of a student's progress, is in itself a dangerous evil. Books exemplifying it may justly be looked upon with suspicion, the presumption is against them, and they always must expect to be cited to "show cause." They satisfy curiosity where they should awaken it. They produce a superficial appearance of adequacy and completeness. Their very form seems to round off and even up and finish off an era. They diminish the effects of perspective, and they deaden contrast. Is it easy to realize that there are four generations from Addison to Godwin, when one reads a bit of the *Spectator* and a bit of *Political Justice*, bound within the same covers, on the same paper, in the same type? It is a substantial fact about an author that selections from his writings are to be searched for in nine stately quarto volumes of "works," or in a thin phamphlet, or in a chunky duodecimo. How much more real to turn the pages of the *Tatler*, the *Spectator*, or the *Rambler*, to find a half dozen numbers indicated for reading, and thus to know the book ever so slightly at first hand, than to read the same extracted selections in a group by themselves within a collection of samples.

Even if practical exigencies make it impossible to refer to actual unabridged "whole works," there are copious and excellent "select works" of the most important eighteenth-century authors: Craik's *Swift*, and Dobson's *Steele*, and Wendell and Greenough's *Addison*, and Payne's *Burke*, and Fraser's *Berkeley*, provided with the liberal annotation which is necessary for the vivid realization of a text dealing as prose does with occasional subjects, and which is designedly absent from Professor Alden's book. There is but one type of representative prose selections which is practically necessary—a handbook for the purely formal study of style—something far more rigidly technical than Professor Alden has intended to create.

A book of prose selections illustrating an era cannot be affectionately regarded for its own sake. Verse collections may be. Bryant's *Library of*

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Poetry and Song is large and lovable; the *Golden Treasury*, though its beauty is "held too much in the hollow of the hand," is as exquisite as a sea-shell; and the *Greek Anthology* is a drawerful of the gems and coins of the sculptors of language in little. But the book of prose extracts is incurably a textbook. Its contents may be most select and generous: the choicest words of the robust Defoe, the human Steele, the large-souled Johnson, the magnificent Burke; but it obstinately refuses to be loved.

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Kleines Lesebuch in Lautschrift. I. u. II. Theile. Von WILHELM VIETOR. Leipzig: B. G. Teubner, 1912. I, M. 0.80; II, M. 3.

Vietor's phonetic readers are well known to any student of phonetics. His *Kleines Lesebuch* is a very practical introduction to German pronunciation. It is in essence a shortened edition of *Deutsches Lesebuch*, Part I. The *Lesebuch*, Part II, offers an additional amount of reading material.

The phonetic method deserves more consideration by American teachers. It is now widely used in continental schools.

Outlines of the History of German Literature. By JOHN G. ROBERTSON. New York: G. B. Putnam's Sons, 1911. $1.25 net.

Robertson's outlines are intended to accompany his larger *History of German Literature* with a briefer introduction to the subject. The economy of space compared with the larger book has been attained by the suppression of detail concerning minor writers; the chief writers and works have, on the other hand, been dealt with more extensively. The book has been provided with chronological tables and the reader will find the parallel tabulation of events in English and other literature useful in helping him to place the phenomena and movements of German Literature. It is in every respect a very useful book.

Dictionary of German and English, English and German. By MAX BELLOWS. New York: Henry Holt & Co., 1912. $1.75.

This is an extremely practical dictionary which also pays attention to scientific and technical expressions. Its main features are, first, an introduction giving the essentials of German declensions and conjugations as well as a comparison of German and American measures and weights; second, it distinguishes the masculine, feminine, and neuter genders by different types; third, both German-English and English-German divisions are arranged concurrently on the same page. The dictionary appears to be a thorough piece of work and should be widely used in American schools. A stronger binding might be desired for a book intended for such extensive handling.

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BOOKS RECEIVED

HISTORY

Webster, Hutton. Ancient History. Boston: D. C. Heath & Co., 1913. Pp. 664. Illustrated.

MATHEMATICS

Jones, Samuel I. Mathematical Wrinkles. Consisting of Knotty Problems, Mathematical Recreations; Answers and Solutions; Rules of Mensuration; Short Methods; Helps, Tables, etc. Gunter, Texas: Samuel I. Jones, 1913. Pp. 325. $1.65 net.

MISCELLANEOUS

Hartshorne, Hugh. Worship in the Sunday School. New York: Teachers College, Columbia University, 1913. Pp. 210. $1.50.

Miller, Edmund W. Monographs on Anniversaries and Festivals. Jersey City, N.J., 1913.

EDUCATION AND PHILOSOPHY

Huey, Edmund Burke. Backward and Feeble-Minded Children. Baltimore: Warwick & York, 1912. Pp. 225. Illustrated. $1.40.

Leake, Albert H. Industrial Education, Its Problems, Methods, and Dangers. (Hart, Schaffner & Marx Prize Essays.) Boston: Houghton Mifflin Co., 1913. Pp. 205.

Noyes, Anna G. How I Kept My Baby Well. (Educational Psychology Monographs.) Baltimore: Warwick & York, 1913. Pp. 193.

Sneeden, David. Problems of Educational Readjustment. Boston: Houghton Mifflin Co., 1913. Pp. 262.

Winch, W. H. Inductive versus Deductive Methods of Teaching: An Experimental Research. (Educational Psychology Monographs.) Baltimore: Warwick & York, 1913. Pp. 146. $1.25.

ENGLISH

Baker, Franklin T., and Ashley, H. Thorndike. Everyday English. Book II. New York: Macmillan, 1913. Pp. 336.

Brewster, William T. English Composition and Style. New York: The Century Co., 1912. Pp. 512.

Briggs, Thomas H., and McKinney, Isabel. A First Book of Composition for High Schools. New York: Ginn & Co., 1913. Pp. vii+300.

Brubacher, A. R., and Snyder, Dorothy E. High-School English. Book II. New York: Charles E. Merrill Co., 1912. Pp. 374.

Campagnac, E. T. The Teaching of Composition. (Riverside Educational Monographs.) Boston: Houghton Mifflin Co., 1912. Pp. 62.

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Clippinger, Erle E. Illustrated Lessons in Composition and Rhetoric. Boston: Silver, Burdett & Co., 1912. Pp. iv+371. $1.50.

Comstock, Fanny. A Dickens Dramatic Reader. Scenes from *Pickwick Papers*, from *Nicholas Nickelby*, *The Cricket on the Hearth*, and *A Christmas Carol*. Boston: Ginn & Co., 1913. Pp. 336. $0.60.

Curry, S. S. Spoken English: A Method of Improving Speech and Reading by Studying Voice Conditions and Modulations in Union with Their Cases in Thinking and Feeling. Boston: Expression Co., 1913. Pp. 320.

Gerrish, Carolyn M., and Cunningham, Margaret. Practical English Composition. Boston: D. C. Heath & Co., 1912. Pp. 428.

Hitchcock, Alfred M. Rhetoric and the Study of Literature. New York: Henry Holt & Co., 1913. Pp. 408. $1.00.

Hanson, Charles Lane. Two Years' Course in English Composition. Boston: Ginn & Co., 1912. Pp. iv+377.

Hutchison, Percy Adams. British Poems from "Canterbury Tales" to "Recessional." New York: Scribner, 1912. xxi+537.

Kent, Roland G., and Hall, I. Freeman. Stories from The Far East. (Merrill's Story Books.) New York: Charles E. Merrill Co., 1913. Pp. 152. $0.30.

Kittredge, George Lyman, and Farley, Frank Edgar. An Advanced English Grammar with Exercises. Boston: Ginn & Co., 1913. Pp. 333.

Murch, Herbert S. (ed.). Heroes, Hero-Worship, and the Heroic in History, by Thomas Carlyle. Boston: D. C. Heath & Co., 1913. Pp. 313.

Newcomer, Alphonso G. (ed.). Macaulay's Essays on Oliver Goldsmith, Frederick the Great, and Madame d'Arblay. Chicago: Scott, Foresman & Co., 1913. Pp. 262.

Pittinger, L. A. The English Teacher's Manual; to Accompany the Study of Thomas & Howe's Composition and Rhetoric. New York: Longmans, Green & Co., 1912. Pp. 116. $0.25.

Sampson, Martin W., and Holland, Ernest O. Written and Oral Composition. New York: American Book Co., 1907. Pp. 293.

Scott, Fred Newton, and Buck, Gertrude. A Brief English Grammar. Chicago: Scott, Foresman & Co., 1905. Pp. 195.

Sheffield, Alfred Dwight. Grammar and Thinking: A Study of the Working Conceptions in Syntax. New York: G. P. Putnam's Sons, 1912. Pp. 193.

Steeves, Harrison Ross, and Ristine, Frank Humphrey (ed.). Representative Essays in Modern Thought. A Basis for Composition. New York: American Book Co., 1913. Pp. 533. $1.50.

Sypherd, Wilbur Owen. A Handbook of English for Engineers. Chicago: Scott, Foresman & Co., 1913. Pp. 314.

Webster's Secondary School Dictionary. Abridged from Webster's New International Dictionary. 1,000 illustrations. New York: American Book Co., 1913. Pp. 864. $1.50.

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CURRENT EDUCATIONAL LITERATURE IN THE PERIODICALS[1]

IRENE WARREN
Librarian, School of Education, University of Chicago

Andrews, E. B. Education through reading. Pop. Sci. Mo. 83:139–49. (Ag. '13.)

Blaine, Anita McCormick. The ideals which led to the foundation of the School of Education. El. School T. 14:11–19. (S. '13.)

Brooks, E. C. Seven, eight, and nine years in the elementary school. El. School T. 14:20–28. (S. '13.)

Carrington, Thomas. Outdoor schools. Harp. W. 57:12. (26 Jl. '13.)

Dean, Arthur D. The new education: nature, the community, and the home are today combining with the school to train children for an industrial democracy. Craftsman 24:463–71. (Ag. '13.)

Doctorates conferred by American universities. Science 38:259–67. (22 Ag. '13.)

Gray, Mary Richards. The education of children in the school gardens of Los Angeles. Craftsman 24:472–79. (Ag. '13.)

Hanmer, Lee F. The schoolhouse evening centre—what it is, what it costs and what it pays. J. of Educa. (Bost.) 78:117–18. (14 Ag. '13.)

Harris, James H. Vacation schools. J. of Educa. (Bost.) 78:148–49. (21 Ag. '13.)

Human stock shows. Lit.D. 47:127–28. (26 Jl. '13.)

Judson, Harry Pratt. Economy in education. School R. 21:441–45. (S. '13.)

Key, Ellen. Education for motherhood. II. Atlan. 112:191–97. (Ag. '13.)

Leupp, Francis E. The progressive ideal in school management. Scrib. M. 54:388–94. (S. '13.)

Main, Josiah. Sequence of sciences in the high school. Pop. Sci. Mo. 83:158–63. (Ag. '13.)

(A) new laboratory for research in optics and photography. Sci. Am. Sup. 76:56–57. (26 Jl. '13.)

(An) open-window school. Lit.D. 47:241–42. (16 Ag. '13.)

Phelps, C. L. A study of errors in tests of adding ability. El. School T. 14:29–39. (S. '13.)

(The) traveling university. J. of Educa. (Bost.) 78:124–25. (14 Ag. '13.)

Walcott, Gregory D. The final examination of seniors in American colleges. Science 38:179–85. (8 Ag. '13.)

Wells, Frederic Lyman. The principle of mental tests. Science 38:221–24. (15 Ag. '13.)

[1] *Abbreviations.*—Atlan., Atlantic Monthly; El. School T., Elementary School Teacher; Harp. W., Harper's Weekly; J. of Educa. (Bost.), Journal of Education (Boston); Lit.D., Literary Digest; Pop. Sci. Mo., Popular Science Monthly; School R., School Review; Sci. Am. Sup., Scientific American Supplement; Scrib. M., Scribner's Magazine.

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DO TOO MANY STUDENTS FAIL?

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There was a time, and that well within the memory of most of us, when the teacher in whose classes a comparatively low percentage of pupils passed was considered good on the basis of this fact alone. He was given the name of being a man of high standards and rigorous requirements. Conversely, the teacher, 90 per cent of whose pupils passed, at once laid himself under the suspicion of being lax, easy, and tender-hearted to a fault.

In recent years a new view has come to be taken by the profession generally. No longer does the teacher whose pupils fail in large numbers enjoy, on account of that fact alone, a reputation for thoroughness and strength. This change is in nowise due to a relaxation in educational demands, but simply to the persistent and ever-recurring inquiry: "Why must so many pupils fail? Is it not possible that many of these failing pupils might have succeeded had they been given sufficient encouragement and individual care and help?"

It is further being pointed out that the criterion, "The larger the percentage of failures, the higher the standard," is an exceedingly dangerous one; for this method of measurement really puts a premium upon poor teaching; it encourages obscurity and abstruseness; it offers absolutely no incentive to the active, alert, conscientious teacher who is warmed by a constant desire that his pupils

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should succeed and grow and learn; it holds out no inducement to a teacher to take freely of his time in order to explain things to the backward students, or to seek to understand the sources of their difficulties. On the other hand, the teacher who is possessed of the new ideals says to himself and his class: "Here are the things we must accomplish during the term. We shall all work together for their accomplishment. I am here to help you and not to puzzle you. If we work hard together we shall succeed."

At this point it should be noted that the high school presents a set of conditions where it is peculiarly necessary that the pupil be encouraged to remain. Many parents are making sacrifices to keep their boys in school. In such cases the boy himself probably feels the call to be out and earn something. Besides, he is at a period of life when failure is least easily borne, and when the discipline of adversity is most severe and least bearable. He is at the climax, the turning-point, of his early youth. Encouragement may send him on; discouragement may send him back. It is essential that the teacher should recognize his responsibility in all these peculiar relationships, and that he should be an active force in saving and helping, and not an inert mass, or worse, in the way of educational progress of the youth. If the student is a girl, the foregoing conditions, and added ones, obtain. During her high-school years her physical organization undergoes a trying and dangerous change, fraught with peril and full of portent. Many days she is in school when by all rules of health she should be almost anywhere else instead. No doubt many girls have left school, ill or discouraged, because of the lack of a kind word, or a bit of sympathetic counsel at just the right time.

The report of the Commissioner of Education for 1909–10 (the latest report giving these particular data) shows that in the public high schools reporting, there were 662,189 pupils studying mathematics, and 844,031 studying English. The increasing importance of the high-school problem is partly indicated by the fact that, whereas in 1889–90 there were 2,526 public, and 1,632 private, high schools, enrolling a total of 367,003 pupils, in 1909–10 there were 10,213 public, and 1,781 private, high schools, enrolling a total of 1,032,461 pupils, an increase of 208 per cent in high-school enrol-

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ment as against a 47 per cent increase in population during the same period of time. All these facts show the increasing demand for secondary-school training. Business and professional men, laborers and manufacturers, all are sending their children to the high school. These schools, once exclusive, are fast becoming universal.

Since this largely patronized high school is comparatively new, we are only beginning to realize its possibilities. We are in the midst of a readjustment of the curriculum to the vital needs of the pupils. We are beginning to see that the high school is not a "poor man's college." It is not a college at all. Its pupils are but children when they enter, and they have not yet passed the period of adolescence in their later high-school years. They must not be treated as responsible adults are treated, but must be watched and tended. Their way must, to a considerable degree, be made plain. While they must not be left unacquainted with hard work, they should be furnished with a proper amount of straw for their bricks. High-school men are now recognizing the fact that the schools are losing too many of their pupils, and that too many are being compelled to take work over. We are beginning to see that the large percentage of failing and "left" pupils is an argument for those who contend that our high schools are a poor financial investment. We are beginning to see that we must cease eliminating and retarding so many of our pupils, and that we must bend our efforts toward the elimination of the causes of their poor work and discouragement.

Some of the causes of elimination and retardation are: illness, various physical defects, dulness, indifference, need of pupil's aid in supporting the family, and so forth. At first it may appear that these causes are beyond the teacher's control, yet in the case of illness, for example, is it not true that a word of warning to the student might have prevented the attack of cold or grippe? Or, in the case of withdrawal to help support the family, how many parents might have been induced to leave their children in school if they could have been shown how the education their children were receiving was going to be of practical help in their everyday lives and that at no distant time? Dulness, indifference, lack of attention may all be thought, at first glance, to be things that may

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be laid at the pupil's own door. Yet how many times may a teacher, by personal inquiry, ascertain the facts which are at the base of this indifference! How often will personal interviews discover little misunderstandings of work previously gone over—misunderstandings that never would have come to light in the routine of the classroom, but which have been in the way of successful work!

Let us suppose that by extra personal effort—by visits to a few homes of failing students, by quiet talks, by face-to-face exhortation—each teacher were to make it possible for one more student to remain in school one more full year. Allowing forty teachers for a school of a thousand pupils, this extra effort would mean that 4 per cent more pupils, or forty in each thousand, would be held under the influence of the high school for an extra year. When we consider the possibilities with reference to the total number of high schools and high-school pupils in the country, our 4 per cent becomes 45,259. The increased value of these young people to their communities as a result of this added year in high school, and the increased enrichment of their own lives, should make us consider even more carefully our high-school problems.

During the past year we conducted a questionnaire, the purpose of which was to throw light on the problem of retardation and elimination, particularly in the studies of English and mathematics, in our high schools. We addressed our inquiries to over three hundred high-school principals in all parts of the United States, and received about sixty replies which were more or less complete.

A summary of the data obtained based on figures from 46 high schools, reveals, among others, the following facts: In these schools, during a given semester, a total of 33,276 pupils were studying English, and 24,404 were studying mathematics. Of the total enrolment in English, 27,101, or 81.44 per cent, passed, and of the total enrolment in mathematics, 18,364, or 75.25 per cent, passed.

Of these 46 schools, 18 had less than 400 pupils enrolled in English. Taking these as one group, we find 4,096 enrolled in English, of whom 82.10 per cent passed; in mathematics, 3,684 were enrolled, of whom 75.55 per cent passed. Another group, made up of those schools whose enrolment in English was over

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800, presents the following figures: Total enrolment in English, 21,003; total passing, 16,932, or 80.62 per cent. In mathematics, total enrolment, 14,683; total passing, 10,972, or 74.72 per cent. The third group of schools, those whose total enrolment in English was between 400 and 800, shows a total enrolment in English of 8,177; passed, 6,806, or 83.23 per cent; in mathematics, enrolment, 6,037; passed, 4,572, or 75.73 per cent.

The figures for these groups are interesting in many ways, but their main bearing upon our problem is the light they throw upon the questions: "What has the size of the high school to do with the percentage of those passing? Does not the large school tend to lose a larger percentage of its pupils?" So far as our figures may be given any weight, they seem to point to the following facts: (1) There is not a great deal of difference between the large and small high schools in the matter of the successful passing of pupils; in English this difference amounts to but 1.48 per cent, and in mathematics but 1.83 per cent. (2) But while, both in English and in mathematics, the very large schools show the smallest percentage passing, in English it is the group of middle-sized schools, and in mathematics the group of smallest schools that make the best showing. (3) It is pertinent to note here that the large schools vary among themselves to a truly startling degree with respect to the percentage of those passing. The lowest percentage in English in this group is 69.0 per cent and the highest 89.7 per cent, a difference of 20.7 per cent, or 207 pupils in each 1,000! Further, this percentage of 89.7 is made in a school that enrols 1,275 pupils in English. In mathematics the figures are still more startling. The lowest percentage in mathematics in any school of this group is 59.5 per cent, and the highest is 83.8 per cent, a difference of 24.3 per cent, or 243 in each 1,000 students! The largest enrolment any school shows in mathematics is 2,019; in this school 77.6 per cent of the students in mathematics pass, which is 2.35 per cent above the average for mathematics in all the other schools. (4) Not only do the schools in this group vary greatly, but the same school may show striking facts when its records in different subjects are compared. One large western high school passes 84.8 per cent in English, and but 72.5 per cent in mathematics. Two other large

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schools pass 89.4 per cent and 86.3 per cent respectively in English, and 74.3 per cent and 71.6 per cent respectively in mathematics. Thus both of these schools are above the average in English, and below it in mathematics. On the other hand, one far-western school is 4.9 per cent below the average in English, and 4.1 per cent above it in mathematics. (5) Though the middle-sized schools show the largest passing percentage in English, they vary among themselves even more strikingly than do the larger schools. The lowest passing percentage here is 54.9, and the highest is 94.1, the enrolment being 619 and 723 respectively. The difference in percentage here is 39.2 per cent, or 392 pupils in 1,000.

To summarize these data, then, with regard to the influence of the size of the school upon the percentage passing, what slight difference there is appears to be against the largest schools; but the variations among the different schools of the same group, and the variations among different studies in the same school, are so great, and the high percentages obtained in *some* schools of *each* group, all show that size itself is far from the main factor in determining efficiency: indeed, that it comes near to being a negligible factor.

There is a further question with a very direct bearing upon the one just discussed. It is: In which group of schools does the proportionately largest number of students drop out? We approached this question with the notion that the answer would be: "The largest schools, of course." But whether because of better truancy laws in larger cities, or better organization of the faculties in the matter of delinquency reports, or more efficient clerical forces to aid in holding absent and tardy students to account—at any rate there is not much difference between the showing of the small schools and that of the large ones. In English, the small schools lose 7.32 per cent, the middle group, 7.77 per cent, and the large schools, 8.59 per cent; in mathematics, the poorest showing is made by the middle group—10.7 per cent—while the small schools lose 7.46 per cent, and the large ones, 7.73 per cent. Again in this matter, the wide variation among the different schools of the same group shows that other factors than the size of the school must be held mainly responsible for the numbers who leave before examination.

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At this point we should like to call attention to some facts that have puzzled us: (1) We have reports from four southern schools, which show the following percentages as passing in English: 69.0, 65.0, 91.7, and 54.9; and in mathematics: 59.5, 60.1, 49.2, and 57.9 respectively. Why are these figures so low? We do not know. Their average passing percentages, based on their total enrolments in English and mathematics, respectively, are but 66.52, and 58.44. (2) Why should a great school of the Middle West drop to 75.4 per cent in English, and come up to 77.6 per cent in mathematics? It has 2,019 students in mathematics, and 2,640 in English. The school is studying the problems of retardation and elimination, and yet the results do not appear. These points show some of the surprises that are in store for him who would investigate a problem of such wide reaches and various ramifications.

Coming to the question of the relative frequency of failures in the various subjects of the curriculum, we find some interesting facts. Mathematics maintains its reputation as a high-school bugbear by presenting the lowest passing percentage in 25 out of 46 schools from which complete reports were received, and by being the only one out of all the subjects failing to be highest in at least one school.

Perhaps, because of this reputation of the subject, the teacher is too frequently content to say that the cause of the large mortality in mathematics is lack of mental ability. The data we obtained do not bear out this conclusion. We asked the question: "Do you find that proportionately more students lack mental ability in mathematics than in English?" The answers were: Yes, 25; No, 21. "Than in foreign languages?" Yes, 23; No, 27. "Than in science?" Yes, 19; No, 25. "Than in history?" Yes, 27; No, 19. It would seem that the principal trouble in mathematics is not a general lack of mathematical ability on the part of the student. We believe rather that it is the greater dependence of each lesson upon those preceding. For example, if the pupil misses or fails to understand fully the work in lowest common multiple, he has trouble in addition and subtraction of fractions and in the solution of fractional equations.

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That much of the above difficulty can be overcome is shown by the following facts taken from reports received. In schools employing at least one of the special methods for minimizing retardation, described elsewhere in this paper, there was a total of 9,771 students taking mathematics, with 7,587, or 77.6 per cent, passing, while in schools not employing such special methods there was a total of 9,164 pupils taking mathematics, 6,608, or 72.1 per cent, of whom passed. It cannot be definitely stated that the difference in number of pupils passing was due to the special effort; it could be due in part at least to other causes, but the figures are very significant. Again, out of the 28 high schools having an enrolment of over 400 in English 15 have a passing percentage in mathematics above the average passing percentage of all schools sending data. Of these 13 employ one or more of the special methods referred to above, while but few of the schools with low passing percentages employ such methods.

Two other interesting facts appeared which may help in the analysis of the causes of large numbers of failures: (1) Some schools show a wide divergence as between different subjects: for example, Cleveland, Elgin, Schenectady, Portland (Me.), and many others. (2) Aside from mathematics, each subject makes the best showing in some schools, and the poorest showing in others. These facts indicate unmistakably that if any particular school finds that a regularly low percentage of its students is passing in any of its subjects the situation is a cause for investigation; for the experience of these 46 schools shows that it is possible for relatively high percentages of students in good schools to pass any subject in the curriculum. Conversely, they show that even in the so-called "easier" subjects, and in Junior and Senior elective work, where we may expect a measurable degree of enthusiasm and earnestness on the part of the students, it is possible to have a relatively large number of failures. In other words, whatever may be true of the general standard of any school or of the relative ease or difficulty of the various subjects, one factor must constantly be brought into the reckoning, and that is the teacher behind the desk.

This brings us to the vital part of our inquiry. We have seen that in English the experience of these schools has been that of

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each 1,000 pupils who entered only 814 passed the subject successfully, 82 dropping out before reaching the examination, and 104 failing in the examination. In mathematics only 753 of the 1,000 passed, 84 dropping out during the term, and 163 failing in the examination. Further, we have seen that in some schools numbers failing and dropping out were nothing less than startling; and we have found schools, on the other hand, which, we have every reason to believe, are maintaining a high degree of excellence, but in which a gratifyingly large percentage of students pass. We have seen that figures will not warrant us in explaining this set of facts on superficial grounds; that the varying degree of difficulty in the different subjects does not account for more than a small part of these facts; that the teacher seems to be the principal determining element, and that he must be the one to look to if we are to increase the efficiency of our schools. What, then, are the teachers in these schools of high efficiency doing to prevent their students from failing and leaving school? And what are they doing with pupils who have already shown weakness?

The first question we asked on this latter point was this: Do you have special classes for those who have failed? Of those who replied, 6 said yes and 36 said no. Of the 6, 2 have tried the other plan (that of scattering repeaters through other classes); and of the 36, 17 have tried the plan of repeater classes, and have discontinued it. Among the reasons given for separate classes are these: (1) Other classes are not held back by slow or indifferent pupils. (2) The work can be better suited to the needs of the slow pupils. (3) In English, where students have knowledge of literature read, but cannot write, they are enabled to read different selections. The principal arguments against failure classes are: (1) Failure classes lack any standard of excellence. (2) There is no incentive for effort, no enthusiasm. (3) Repeaters know some part of their subject-matter well, and in general classes they are able to excel in these parts—an opportunity which they highly appreciate. (4) Failure classes have a stigma attached to them. (5) Discipline is difficult in such classes.

Two principals point out an important distinction in this matter: If a failure class can be small, they say, it may constitute the best

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solution of the difficulty. The overwhelming sentiment of the replies received, however, is against segregation. The figures seem to indorse this judgment, so far as they have any bearing, for the schools with the high passing percentages are almost a unit in scattering their weak pupils. While two of the schools who segregate their failures make a good showing, one of the lowest more than offsets this average.

Besides the repeater class plan, the following devices are being successfully used: (1) special teachers, to give their whole time to weak pupils; (2) special periods of the day definitely set apart for this work; (3) teachers take turns in staying after school or in working extra hours with weak pupils; (4) immediate consultation with parents after one or two failures; (5) immediate consultation with pupil when he begins to get behind; (6) supplementary "make-up" classes.

Here are six specific policies, one or two, or all, of which are being employed by various schools to raise their standard of efficiency. As we study our tables and note the schools that are making a good showing in the success of their students, we find them, almost without exception, to be those that are making use of some of these specific plans. For instance—

Berkeley: We try not to let the pupil get far behind. Re-examination every week.

Lane Technical: Pupils who fail in two or more subjects any month are required to bring their parents. Two weeks from the giving-out of cards all pupils who failed are required to bring a statement of progress from teacher. If no improvement is shown, they must get the card signed at home.

Denver: Seventh-hour class.

Fort Wayne shuts the barn door before the horse gets out: Classes should not exceed 15 the first year, 20 the second, nor 25 anywhere. There should be a special teacher besides.

Evansville: Heads of departments have special coaching hours.

And so we might go on. Occasionally we find schools with high efficiency which do not indicate that they are employing any special plan. But the chief value of facts collected as ours are must lie, it seems to us, in their general trend. Individual instances of what may seem to constitute disquieting exceptions must always appear in large groups of facts like this. They may be due to in-

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complete reports, or to clerical errors, or to abnormal conditions that happened to affect one semester or one study. They do not, it seems to us, invalidate the general conclusion that those schools that are taking a live and intelligent interest in their weak and backward pupils are getting results that justify their efforts.

Let us consider one more specific field of inquiry and that is the physical examination of failing pupils. To the query: "Do you make a physical examination of failing pupils?" 15 schools reply that they make such examination regularly; 7, that they make the test sometimes; 3, that they make no such test. The rest do not answer.

It seems to us that these replies indicate that our schools are not living up either to their duties or to their opportunities in this matter. True, as was pointed out by several of our correspondents, "that matter is taken care of in the grades." But that argument neglects the fact that many physical ills may overtake the student after he has left the grades. It ought not to be necessary to argue the matter here, it seems to us. Modern psychology and physiology have shown us too clearly the close interaction of body and mind; Hall's researches in the period of adolescence have set forth the dangers besetting youth in this period too plainly to permit us to seek excuse for laxity in this matter. A little wise counsel from a good physician might serve more effectively than many words of warning from a teacher, when it comes to keeping a young girl from being a young lady before her time through too many dances and too late hours. A physician's advice should be sought before a boy is allowed in athletics. At any rate, his judgment should be brought into the problem when there are headaches or colds or other "little" ills that are so frequently reported. And of course the eyes and ears should always be watched. Further, abnormality of sight or hearing should always be reported by the grade principal when the pupil enters the high school. Instances where we have been unjust toward a pupil who was failing simply because he could not see, or could not hear, are too fresh in the minds of all of us teachers to permit us to question the necessity for regular physical examination of failing pupils.

In conclusion, then, what shall we say of the efficiency of our

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high schools? As at present administered, so far as we may judge by the 46 schools that make up our data, 18.56 per cent of our pupils in English do not pass successfully a given semester's work; in mathematics, the figures are 24.75 per cent. If these figures are representative (and we believe they are) and if the enrolment in our high schools in this year (1912–13) has reached 1,400,000, as it no doubt has done, judging by its past rate of increase and by the latest report of the United States Commissioner of Education; and if we assume that 1,150,000 pupils are studying English (a conservative assumption, since, according to the reports in which the matter is dealt with, 82 per cent of high-school pupils study English), then 213,440 of these pupils are due to fail each semester this year. And on the same basis, of the 900,000 pupils who entered upon the study of mathematics, 222,750 are due to fail. On the same basis, 94,445 are due to drop out of English each semester this year, without taking the examination, which, in English, usually means dropping out of school, for English is usually required; and 72,360 will drop out of mathematics.

In some of these cases, the best ends of all concerned—students, teachers, parents, and taxpayers—will best be served by dropping these students from the roll of the school. There can be no question that the ends of justice and wisdom will best be served by the failure of some of these pupils in examination and by the repeating of their work. A few are doomed to failure from the start. Inadequate preparation, ill-health, "chronic and insuperable aversion to all kinds of labor," as Irving would have put it, native slowness or ineptitude, all these factors must be figured into our account of the matter; but do these and all kindred factors account for the 222,000 and the 213,000? We cannot believe that they do. We must remember that at the start of a semester's work most of our pupils are well intentioned. They want to pass. They expect to pass. They plan on passing and are willing to work in order to pass. It is after the term is under way that the collar begins to gall the neck, and the heart begins to get weary, and the temper begins to be unstable. It is here, likewise, that weaknesses in health begin to tell. It is undoubtedly here in these early months that many, if not most, of the failures are prepared for. How wise, then, seems

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the counsel of those principals who say: "Don't let them get far behind." "Call in their parents." "Get a statement from their teachers two weeks after failure report." "Have pupil and teacher talk the matter over privately, so that the pupil's point of view may be ascertained, and extenuating circumstances may be learned."

Just how many pupils there are who might be saved, and who ought to be saved, by such added vigilance, it is impossible to say. But it is patent that the number is astoundingly large. Our high schools must reach a higher degree of efficiency, or else they must recognize the fact that they are trying to do something that is out of harmony with the spirit of the age. It is not right that twenty or twenty-five out of each one hundred pupils who come to them for training should be pronounced failures at the end of a trial. It is not profitable from the standpoint of the taxpayers; it is not fair to students or parents; most important of all, it is not necessary, if proper precautionary measures are employed. In no phase of a teacher's work will a little extra effort, a little interest outside of routine work, pay larger dividends, than will effort right here with the faltering student.

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CO-OPERATION OF ALL DEPARTMENTS IN THE TEACHING OF ENGLISH COMPOSITION[1]

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The subject of co-operation in the teaching of English composition is comparatively new, it is tremendously important, and it is one which English teachers cannot profitably discuss by themselves. In saying that the subject is new, I do not mean to imply that no experiments have been tried or that there is no record of them. On the contrary, there are several documents which the seeker after educational experience may consult. For example, the New England Association of Teachers of English has published from time to time accounts of the efforts of its members to solve what one writer calls the problem of "Successful Combination against the Inert." But as compared with the question of electives or vocational guidance, for example, the field is virgin soil.

I speak of the subject as tremendously important. So I believe it to be; no doubt my readers share that opinion—or will do so on a moment's reflection. For we are here concerned with habits almost if not quite the most significant which any individual possesses, namely, language habits. No one will deny that the mastery of the vernacular is the supreme achievement of social beings, and probably no one will deny either that there is no other mastery so difficult, requiring as it does adjustments finer and more complicated than those demanded by any other aspect of human behavior. Moreover, these adjustments begin in early infancy, are operative during every waking hour, and have fairly established themselves by the time a child enters the high school. If now the pupil speaks and writes and reads well, it is necessary only that the new environment foster a growth well begun, not hin-

[1] A paper read before the Secondary Department of the National Education Association at Salt Lake City, July 9, 1913. To appear later in "*Social Administration of the High School*," by Charles Hughes Johnson (Scribners).

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der it or destroy it. If, however, the entering student has made small progress in language or has accumulated a stock of bad practices, to save him will require the united efforts of all the teachers he may meet. How profoundly true this is appears in the doctrine, now widely accepted, that language habits are special, not general; that proficiency in a given situation offers no positive assurance that we shall find it in another. To illustrate from our common experience, pupils often express themselves well in the English classroom and very badly elsewhere. It is in a sense true that unless all instructors teach English it is nearly useless for any to do so. Hence, co-operation deserves our most serious consideration.

DIFFICULTIES TO BE OVERCOME

By co-operation in English we mean the working together of all the teachers of a school to secure, on the part of their students, the correct and effective use of oral and written expression. We have glanced at the necessity of this; let us now consider with some care the difficulties which any plan of co-operation will involve.

1. *Uniform standards.*—There can be no progress in co-operating in English teaching so long as some departments support by example, or are at best indifferent to, language which others condemn or, what is equally destructive, while some departments offer no positive stimulus to accurate and adequate expression in speech and writing. It may be that the teacher of English is overprecise, a purist, and prizes too little the plain and straightforward expression of the results of observation and thought. It may be that the teacher of science prides himself on his freedom from conventionality and has scant respect for good usage. It is, at any rate, more than likely that each goes his own way, quite unfamiliar with the attitude of the other, and as a consequence the pupil finds it easy to choose the path of least resistance.

One reason for such a state is the overspecialization of students in the universities and of teachers in the high schools. It is now possible for a young man or a young woman to secure the Bachelor's degree, and with it a recommendation to a high-school position, without adequate training in the arts, acquaintance with the

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humanities, or grounding in the sciences, as the case may be. The result is a high-school course made up of a series of unrelated units and high-school instruction in which each department not only fails to support the others but may even nullify their efforts. The teacher who knows neither science nor industrial art will make small headway in training a class to express their live interests, while the teachers of those subjects who know little English constantly offend good taste in language and signally fail to complete the training which the English teacher has begun.

A strong reaction against a one-sided preparation which can result only in mutual lack of sympathy and support, and which tends to disintegrate the life of the pupil instead of unifying and harmonizing it, has already set in. It may be desirable to require each teacher in the larger schools to give instruction in at least two departments in order to secure the necessary breadth and catholicity of interest. From the numerous suggestions which have come to my notice I quote the following, which is a part of a series of resolutions presented by a special committee to the Conference of High Schools with the University of Illinois in November, 1913.

> All candidates for high-school positions should do work in English extending through at least two years, with emphasis upon oral and written composition. The committee is impelled to make this recommendation because of the deficiencies in English that so frequently characterize high-school teachers. . The committee recognizes, however, that even the best technical training in English composition will not alone suffice to accomplish the desired results. In addition to this, every effort should be made in *all* classes to develop adequate habits of clear and concise expression, and to encourage effective standards of diction, syntax, and logical organization. We recommend that the Conference urge upon college and university authorities the importance of emphasizing this phase of education in *all* classes in which intending high-school teachers are enrolled.

The last recommendation is an interesting confirmation of the necessity of co-operation in English, even in the colleges.

2. *Common aims.*—But granting that the teachers of a school have been broadly and adequately prepared and that there exists among them reasonable agreement as to what standards of expression in language should be set up, difficulties will remain. Promi-

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nent among these is that of setting up common aims. Overspecialization is the chief stumbling-block here also. The teacher of physics wants to make scientists and the teacher of English wants to make novelists, while both should be eager to make men. Neither has time, or will take it, to visit the classes of the other, and no common interests are discovered. Moreover, co-operation is very generally viewed as one-sided. It is supposed to be a device for giving English a large place in the program or, on the other hand, a means by which teachers of other subjects may unload their manuscripts and escape the grind of correcting them. These objections must be removed before the necessary willingness to co-operate can be secured.

It is not the business of the science teacher to give instruction in the principles of English composition. That subject has its proper technique, and instruction in the technique of composition requires skill born of experience, as in the case of any other sort of instruction. It will be sufficient if the science teacher will but require his pupils to employ to the full whatever command of language they possess. So far as correctness is concerned, it is certainly true that high-school pupils rarely make mistakes out of ignorance. They know what is right but fail to follow it. This all teachers must insist that they do and, like Goldsmith's village preacher, practice it themselves. Teachers in departments other than English need not fear encroachment, then, for it is demanded only that they require the pupils to use the knowledge they possess. This doctrine may, however, be too narrowly interpreted. Many proceed on the supposition that co-operation in English means merely correcting bad grammar, bad pronunciation, and bad spelling, with the possible addition of insistence on neat manuscript. These are certainly desiderata. "These ought ye to have done, and not to have left the other undone." Language is almost identical with thought. Meagerness, confusion, and inexactness of expression are fairly indicative of like qualities of idea. When all is said that can be said for those who think by means of images, objects, drawings, or what not, the fact remains that almost all of our thinking is done with words. Hence, when the teacher of geometry insists on crystal clearness of statement, he is really making sure

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that the pupil grasps the idea; when the teacher of history requires the evidence on a point to be properly arranged and adequately set forth, he has really brought the individual and the class to a complete consciousness of the facts involved, has secured full knowledge where half-knowledge lurked before. As soon as all teachers understand this and act accordingly, our problem will be practically solved. As it is now, we divine what is passing in the pupil's mind, supply the words which he cannot find, and hasten on, with a resulting lack of thoroughness which is the most crying weakness of our schools. A few things properly mastered, a few steps carefully taken would result in more knowledge and better training than we now secure by our hurried attempt to orient the boy in his teens in all the formulated and predigested experience of the race. And there is no more efficient means of assimilation and mastery than complete, accurate, and adequate expression in speech and writing. Hence, the teacher of English should enforce a few simple principles of composition that will enable the pupil to plan and execute an oral report or paper in history or in science, and the teachers of those subjects should aid the pupil to secure such a grasp of the subject-matter as will make such reports and papers possible.

3. *Working conditions.*—But quite enough has been said about teachers. They are unable, however willing, to solve the problem alone. School officers and administrators must provide the necessary conditions. Suppose the English teacher meets a class of forty pupils each period of the school day. This is a situation somewhat worse than the average but it is by no means unknown. How, in that case, will he give sympathetic attention to the interests of his pupils so that their practice in speaking and writing may react favorably on their work in other classes? How will he attend carefully to the individual so that his grasp of principles may be assured? How will he retain sufficient energy to consult with his colleagues and devise plans of assault on particularly stubborn fastnesses of metropolitan polyglot or rural *patois?* We write a course of study for the English teacher and crowd it with literary masterpieces—thought important for those who will attend college. Then we demand more than twice as much work of him as he can

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possibly do well and wonder why he does not succeed in vanquishing, single-handed, the foes of clear thinking and correct and clear expression which have been intrenched for years, and which can now command aid and succor from all sides during every waking hour.

As for teachers of other subjects, while they are not so grievously overburdened, yet they, too, are often under the necessity of hurrying through a heavy course, with too many pupils to be able to think of the possibility of dividing with someone else responsibility for mastery of the vernacular.

Ultimately the problem of co-operation is one for the principal, the superintendent, and the school board. It is primarily a question of economics. The task of providing a people's college in every town and section to which the humblest may freely go and in which he may receive instruction in almost every branch of human knowledge and training in every art known to man is greater than is generally realized. To make our already large investment pay we must more than double it. A fair question may be raised as to whether we are justified in diverting large sums for the purchase of equipment to turn out a few would-be engineers, for example, when we do not provide adequately for training all in the fundamental arts of life. At all events, it will require as much zeal and pride and generous outlay to secure notable results in English as in molding and turning, and the sooner this is realized, the sooner we shall get results.

In a given school, then, co-operation in English must be brought about by the principal. He alone can see the problem from all sides; he alone is free, or ought to be, from predilection for one activity or interest; he should see his boys and girls as developing beings with whole undivided lives; he is in a position not only to institute plans, but to see that they are carried out, and to judge of the results. Wherever any measure of success in co-operation has been secured, the principal has generally been the guiding force.

SUCCESSFUL PLANS

This brings us at last to the point where we can speak for a moment of a few successful plans. Most notable, perhaps, is that now in operation in the Cicero Township High School near

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Chicago, Ill. This is a school in an industrial community. The parents are largely of foreign birth and not well to do. The pupils enter high school as much in need of training in the vernacular as any that can be found. What Principal Church is doing here will be done elsewhere—as soon as the importance of it is realized.

Mr. Church recognized the economic aspect of the problem and began reform by inducing his board to supply him with additional teachers. He has thus reduced the number of pupils assigned to a teacher of English to sixty. These teachers are on duty in their classrooms throughout the school day and afterward to deal with individuals and to discuss their oral and written work with them. The next step was to secure unanimity of effort in certain specific matters. This was attained by having the English teachers prepare a brief statement as to what other teachers might do to enforce the instruction they were giving; as, for example, the correcting of grammatical errors, the use, when appropriate, of full sentences, etc. Eventually, it was found desirable to issue a monthly bulletin by means of which each teacher might know what instruction in English was being given and might demand that it be observed in his recitations. It was agreed that all departments should keep a separate and distinct record of the quality of the English used by each pupil, and that the average of such marks should constitute 25 per cent of the composition grade given to the pupil at the end of the semester.

The effort is described by competent observers as wonderful. The entire school is pervaded by an atmosphere of good English, and the performance of the pupils, coming as they do from ill-educated homes, is comparable to that which may be found in the small, high-grade private school.

Another typical example of successful co-operation is to be found in the Boston High School of Commerce. The principal, Mr. O. C. Gallagher, describes their plan as follows:

> To keep the pupils on the watch for accurate, effective, and smooth composition in all their work, they were informed that at frequent, though unstated, intervals their papers in other subjects would be corrected by their English teachers to ascertain their observance of the principles taught in the English classes. The marks thus obtained are entered upon the regular composition work, and unsatisfactory papers are revised or rewritten, the same as unsatis-

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factory themes. In addition, teachers of other subjects are urged to send batches of papers whenever pupils seem to be growing careless—a condition that often prevails immediately after the correction of sets of papers in subjects other than English.

The teacher of the other subject demands that the work be clear and substantially correct in spelling, punctuation, and sentence structure. Failing to secure the first, he lowers the pupil's mark, and at his option, demands revision; failing to secure the second, he withholds all credit until the work is presented in a satisfactory form. The teacher of English insists that every piece of writing shall be regarded as an English theme to be corrected, revised, and rewritten, and to count in the making-up of the mark in English. The collection of papers at unexpected moments convinces most pupils of the unwisdom of taking chances; for even if the English teacher fails to collect a set the teacher of the other subject is likely to send him any piece of slipshod work.

Again, a conscientious attempt is made to teach pupils how to answer questions in other subjects. We correlate the English work in the first year with history; in the second, with commercial geography; in the third, with local industries and civil government; in the fourth, with business law and economics. By drawing upon these branches for occasional subjects, and correcting the themes orally for sentence structure, unity, mass, and coherence, we try to train the pupils to bear in mind the principles of English while their attention is focused upon another subject. Similarly in connection with science, descriptions of apparatus and expositions of experiments are required, and the teacher of science is consulted as to the adequacy of the productions from a technical standpoint. With foreign languages the English department has found most need for co-operation in drill upon points of grammar as they are taken up in German and in French.

Besides "corrective" co-operation, there is such a thing as "preventive or anticipating" co-operation, which is quite as important as the other. Since most teachers are interested in English as a means rather than as an end, the use of English must be made effective in recitation as well as in writing. Several subjects taken up in the first year of a secondary school lend themselves readily to such drill, especially history and elementary science. After consultation between the teacher of English and the teacher of history, the history textbook may be taken up in the English class, and the pupil taught how to make his English do the work that the author tried to have his do. What has the author aimed at? Did he hit it? Why? How? This brings the pupil to the outline; he must get his sights in line. Then the discharge—oral delivery. The class watch as markers, criticize the sighting, aiming, line of flight, and the hit. The aim is thus upon the English essentials of unity and coherence, in whole composition, paragraphs, and sentences.

The result is easier work for the teacher of history, for the teacher of English, and for the pupils, since the work in the English class is "a practical job."

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The pupils can measure the success of their effort in one class by their achievement in the other.

Reports from several other schools embody some of these ideas and suggest a number in addition. One of the most striking is that of keeping pupils on probation in English throughout the course. Delinquents who have been warned and who fail to improve are remanded to the English department for such further training as seems necessary. This may result in the establishing of a sort of hospital squad. Naturally pupils wish to get out of the hospital as soon as may be. Sometimes it is possible to require those who persist in making mistakes in externals, such as spelling, to take a course in typewriting. Again, certain teachers or departments find it feasible to employ the same subject-matter for a part of the course. Science notebooks are made the basis of studies in sentence structure in the English class, pupils engaged in shopwork are taught how to organize notes on their projects in the form of analytical outlines, etc. The outside reading of the pupils is sometimes directed to lists of books which have been made up by all departments in conference, and care is exercised that only a reasonable amount of collateral reading be required of any pupil. Similarly the amount and distribution of written work is determined, the form of notebooks is agreed upon, etc. Of great importance is the compiling of a standard guide to the preparation and correction of manuscripts, which should reflect the practice of good publishers, and which should be in the hands of all teachers and pupils and consistently adhered to.

Various attempts have been made to work out a practicable method of grading so that due account may be taken of the value of substance on the one hand and externals of form on the other. Some years ago, Mr. G. H. Browne, head master of a preparatory school in Cambridge, Mass., established in his institution the custom of dual marking by means of a "numerator" and a "denominator." The mark above the line was to stand for substance in all papers, including those for the English teacher, while the mark below the line was to indicate excellence in "mother-tongue," that is, spelling, etc. Marks of the latter sort were sent in by all teachers, averaged, and reported to the parents. The effect is said

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to have been immediate and gratifying. Lately the practice of holding occasional conferences at which a few papers are examined, corrected, and graded by members from all departments has been growing in favor. Marking has been further systematized in a few cases by the working-out of some sort of scale after the general plan of that invented by Professors Thorndike and Hillegas. These conferences are necessary and may be made the means of unifying and co-ordinating the activities of the different departments of a school to a remarkable degree.

To summarize: Co-operation in English composition, to be successful, must be organized and administered by the head of the school for the good of all. This will involve the setting-up of common aims and the establishing of suitable working conditions. Instruction in the technique of speaking and writing should be regarded as the work of the teachers of English. Teachers of other subjects should refuse to accept oral reports or written papers which are below the standards agreed upon. If the delinquent student fails to repair the deficiency, he should be reported to the principal and sent to the English department for further training. In matters of substance, particularly clearness and completeness, the teacher of each subject should point out the weakness, cause it to be removed, and apportion credit to the paper in accordance with the degree of success attained. By means of class visitation and conference, teachers of English and of other subjects should seek to join their efforts so as to accomplish the most effective training of the student in the arts of study and of expression with the greatest economy of his time and the most consistent unifying of his life.

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THE USE OF PHONETICS IN TEACHING ELEMENTARY FRENCH[1]

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"The main axiom of living philology is that all study of language must be based on phonetics."—HENRY SWEET.

Before discussing this subject we must come to some understanding as to what we aim to teach in classes in elementary French and what we mean by the use of phonetics. While no two teachers probably would agree in regard to the first of these points, the conflict that has been raging in Germany for the past thirty years has somewhat cleared the situation. We have no right to give much consideration to the relatively few pupils who are going to travel extensively in Europe, or remain there in the diplomatic service, as representatives of business houses, or for study or pleasure. But scholars seem to be unanimous in the opinion that whether or not the pupils are to use the spoken language in after life, they can never acquire a sound knowledge or a delicate appreciation of a foreign speech unless they pronounce it correctly. If this were not the case the task of the teacher of French would be greatly simplified, for no attention need be given to the most difficult and complicated part of it, the teaching of pronunciation. The students would simply pronounce the French words in the English manner. They could devote all their attention to the learning of grammatical structure and the meanings of words. This paper would have no *raison d'être*. The ability to read French with profit and enjoyment is what the vast majority of those who study it in school and college will find most useful. But this power can best be gained by learning to pronounce the language, and to pronounce it correctly. Language and sound must go together, and the ear is an indispensable aid to the eye. Its help is very considerable from a

[1] Paper read at the Educational Conference with Secondary Schools, April 18, 1913.

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purely mnemonic point of view. "It is a well-known psychological fact," says Professor Hempl, "that the mental activity involved in pronouncing a word fixes it much more firmly in the mind than do the processes involved in simply seeing and hearing it. It is therefore true economy to practice the oral use of a language, even when the primary aim be but the acquisition of a power to read."[1]

It is often claimed that the pronunciation of French can best be learned by imitation, just as the learner acquired his own language when a child. But both reason and experience show the purely imitative method to be insufficient. For the pupil in the classroom is in a very different position from that of the child in the family. Even if we disregard the difference in age and the fact that the pupil no longer possesses the imitative faculty which he had when he was learning English, the relatively small amount of time that he can give to our study places him at an enormous disadvantage. But his greatest inferiority lies in the fact that he tends constantly to substitute English sounds for French ones. How strong this tendency is can be readily perceived by anyone who has heard French spoken by people of different nationalities, even if they have lived many years in France. The necessary shift to a new basis of articulation is the all-important thing to understand and effect when one undertakes to learn the pronunciation of a new language. The only way that the position and the action of the vocal organs can be made clear to the pupils is by the use of phonetics. Even if the student were not handicapped in the ways shown above, it would be unwise to subject him to the long and painful apprenticeship through which every child must pass in learning his mother-tongue. For even where conditions are most favorable pure imitation does not produce perfect results. The child does not exactly reproduce the pronunciation of its parents, since he owes much to other than parental influence, and only those differences are corrected which attract attention. Otherwise it would be difficult to account for the changes which are constantly taking place in language sounds. There are many Americans who are unable to pronounce *gl* (as in "glass") for which they regularly substitute *dl*, and there are Frenchmen who cannot articulate

[1] George Hempl, *The Easiest German Reading for Learners Young or Old*, p. xv.

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saucisson correctly. Faults of this nature can usually be easily corrected by a simple explanation of the formation of the sounds.

In 1877 Sweet wrote in his *Primer of Phonetics:* "The importance of phonetics as the indispensable foundation of all study of language—whether that study be purely theoretical or practical as well—is now generally admitted." And yet so loath are we to accept anything new that, in spite of extensive use in Germany and France, the practical value of phonetics in teaching has received but slow recognition in England and America. It is objected that the study of a foreign language is already difficult enough without complicating it by the introduction of a new alphabet of "barbarous signs." But those who advocate the use of phonetics in the teaching of elementary French do not propose to add another subject to an already overcrowded curriculum. Whatever may be our opinion about the profit which the pupils would derive from such a study (and it is difficult to find one more fascinating), it is clear that the elementary French class is not the place in which to teach phonetics as a science. It must always be kept in mind that it is a means to an end, and should be employed only in so far as it advances that end. If we are to teach French pronunciation at all, we must teach it as correctly as possible, and we cannot afford to neglect anything which will help us in our difficult and arduous task.

Now just what is meant by the use of phonetics in the classroom? By this I mean such analysis of English and French sounds as will enable the students to understand the differences in the articulations of the two languages, and thus avoid the substitution of the former for the latter. I am convinced that by this means the teaching of the pronunciation, at any rate, may be greatly facilitated, simplified, and made more accurate. Probably every teacher makes use of phonetics to a limited extent without realizing it, just as Monsieur Jourdain "faisait de la prose." Every time a student is told that *s* between two vowels is pronounced like a *z*, or that the sound of *y* may be produced by placing the lips in the position for *u* and the tongue in that for *i* he is learning phonetics. In fact any comparison of English and French sounds belongs to its province, but unfortunately such comparisons are

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usually so inaccurate that they do more harm than good. Teachers would certainly feel at a loss if they were forced sinply to pronounce the sounds of French without making any comment whatever upon them, and this very fact shows that the need for phonetic analysis is felt. The moment that these explanations are made accurate and systematic, so that the pupil is compelled to do some definite comparing and clear thinking for himself, the right use of phonetics is being made.

It would be theoretically possible, but practically very difficult, to teach French pronunciation orally without having recourse to any form of writing. Fortunately, however, phonetics has at its disposition an invaluable aid. That the necessity and value of a phonetic alphabet have been so generally and completely misunderstood is due in large part, I think, to a misapprehension of the nature and purpose of such an alphabet. Both the difficulties connected with its use and the claims made for it have been grossly exaggerated. I have been triumphantly told by teachers that if they had not first known the sounds represented by the symbols they would not have been able to pronounce them, and that they would not take the trouble to learn "those funny letters" even if they did give a perfect pronunciation! As if in some miraculous way the symbols took the place of the teacher, and were a royal road to conversational fluency! Of course no system of signs can be devised which will teach a sound of French that has not been heard and learned, and the teacher who resorts to them will find the importance of his rôle has been increased, not lessened. But in order that each articulation may be remembered and applied correctly it must be associated in the mind of the learner, as it is acquired, with some symbol which everywhere stands for that sound and never for any other. For it must be remembered that anyone who undertakes to teach French pronunciation is confronted with a double problem. He must explain (1) the formation of French sounds and how they differ from the sounds of English, and (2) how these sounds are used in French, under what circumstances vowels are open or closed, long or short, in what ways sounds are combined, etc. (orthoëpy). Now it must be obvious that, having once taught the pupils how to pronounce

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the sound each symbol represents, phonetic script must be of the greatest help in explaining the orthoëpy of French. The comparison with the child who learns to read his own language correctly without the use of anything but the standard or nomic orthography is beside the question. Because, in so far as he does pronounce it correctly, it is because he learned the articulation before he did the spelling, and we all know how easy it is to mispronounce a word we have never heard. Every dictionary finds it necessary to use some sort of special signs to indicate pronunciation, even though it is dealing with the native language of its readers. But the student who is beginning the study of French must learn an entirely new system of sounds and the standard orthography is an absolutely inadequate guide as to the sounds which appear in the various words. In German, Spanish, and Italian the spelling is a relatively safe indication of pronunciation, but in English and French radical changes must be made. Here again we must note that these symbols are not an end in themselves but merely a positive help in learning something that has to be learned anyway. Instead of writing for the beginner the sound *ẽ*, *in* as in *fin*, *im* as in *impossible*, *aim* as in *faim*, *ain* as in *main*, *ing* as in *poing*, *ein* as in *sein*, or *en* as in *examen*, he is given a sign which always represents that sound. That such a system saves a great deal of time to both teachers and pupils is as evident as that the use of mathematical symbols or that of figures instead of words in dates is an economy.

The question now arises what sort of phonetic symbols should be adopted. There are at least 37 distinct sounds in French, while the alphabet contains but 24 letters, of which *x* stands always for two sounds and should be discarded as liable to occasion wrong associations. If we use all the other letters in the standard alphabet we shall need 14 new symbols. Now the best script for our purpose is that which makes the greatest use of the letters already familiar, which introduces as few new signs as possible, and which selects new symbols, the appearance of which is as little disconcerting as may be. Probably each teacher will have his own preferences in this connection. But here the point of expediency enters that question which is of such importance in all teaching. Since the most widely

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used grammar in this country (and the appearance of a new edition will probably increase its use) and the best French-English pronouncing dictionary use the symbols of the International Phonetic Association, and since scores of texts have appeared and are appearing based upon this system, it seems to me best to choose it for our own teaching.[1] The fact that prominent phoneticians, who devised schemes of their own, have replaced them in later editions of their works by the international alphabet points to a constantly wider dissemination of the latter. Personally, with only my own classes in mind, I should prefer certain changes in a system which seems to me in most respects highly satisfactory (*u* for *y*, *ou* for *u*, *eú* for *ø*, *eù* for *œ*, *ɑ̃* for *ɛ̃*). But these points are of small importance when compared with the advantages derived from a scheme which has been generally accepted.

There are two ways in which phonetic symbols may be used: (1) they may be employed in connection with standard spelling and used in explanation of it, or (2) they may be the only letters used until the sounds of the language have been mastered. The first of these methods has the great disadvantage of confusing the pupil, so that he fails to keep the two kinds of writing apart. It is still widely adhered to because it is felt that the transition to the usual orthography will be difficult at a later period. The consensus of opinion among scholars and teachers who have tried both plans is that the difficulty of this transition is not nearly so great as is ordinarily supposed. The point here seems to be that as soon as the sounds of the language are gained even the illogical orthography of English or French can be easily read. Indeed, when written phonetically many words are not changed at all, and the majority will keep some of their usual letters. A great part of the exceptions which complicate French grammar, the plural of nouns, the feminine of adjectives, the agreement of the past participle, the irregular forms of verbs, etc., are after all questions of spelling. As soon as the ear is familiar with the spoken language these orthographic idiosyncrasies offer but little difficulty.

I shall now attempt to give some idea of how I think French pronunciation should be taught. The amount of time devoted to

[1] See James Geddes, Jr., *A Universal Alphabet*, p. 12.

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it must of course vary in every school and with every teacher, but I believe that it should be as considerable as possible. At the very beginning I give some explanation of the nature of sounds and their production, but in the simplest manner and with avoidance of scientific terms. Because of lack of space I cannot reproduce the instruction in detail, and each teacher must devise his own plan for making the pupils understand what is essential, since, it must be adapted to their number and age. In general the method should be that of questioning the students, and they should thus be led to discover and state the facts themselves, the teacher being careful not to give any rules in advance. The first thing to be made clear is that no sounds of English and French are exactly the same, and that while there is rather close correspondence in some cases, other French sounds are so different from any of ours that their production is decidedly difficult for us. These differences are in the main due to the fact that in speaking French the tongue is forward in the mouth, the movement of the lips is very pronounced, and all the vocal organs, while more tense and rigid than with us, take their positions more rapidly and decidedly. When the pupils are quite familiar with the fact that French is a very different language from English I begin to give them some idea of the nature of sounds. The distinction between voiced and voiceless consonants can best be made clear by asking the pupils to pronounce such words as "fine," "soon," "shoe," then to prolong the first sound of those words and compare it with the first sound of "vine," "zone," and the *zh* of "measure." The distinction may be confirmed by singing the sounds, by holding the hands over the ears, or by taking hold of the Adam's apple while the experiment is in progress. The alternation of *fvfvfvfv* and *ava*, *afa* further illustrates the point. Care should be taken that only the phonetic value of the sounds themselves be permitted, thus *f* not *ef*, *v* not *vi*. That all vowels are voiced and may be indefinitely prolonged will now be evident, and we may next consider the lip sounds *p*, *b*, *m*, those produced by contact of the point of the tongue with the roof of the mouth, *t*, *d*. *n*, and those formed by contact of the back of the tongue with the roof of the mouth, *k*, *g*, *ng*.

We may next take up the sounds of French. Those which are most difficult for the beginner are (1) the *y* and *ø*, (2) the oral

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vowels *i*, *e*, *u*, *o* which are pure in French and diphthongized in English when long, (3) the nasalized vowels, (4) the semi-consonants *ɥ*, *w*, and *j*, (5) the *r* sound, (6) the *l* sound. It is well to keep in mind, I think, that those sounds which have no counterparts in English are frequently acquired in a much more satisfactory manner than many others which on account of their resemblance to some in our language long prove troublesome. For example, many Americans who pronounce perfectly *y* and *ø* are never able to distinguish *e* from *ɛ*. The acquisition of the sounds *y* and *ø* by lip position for *u* and tongue position for *i* and *e* respectively is explained in most grammars. The two vowels should be practiced together. The difference between the English diphthongized vowels and the French pure ones can be now discussed and explained (i.e., the raising of the tongue during the articulation of the former). At this point an English sentence may be pronounced for illustration in which the vowels are given the French values. And from time to time a passage may be read in French or a short story told, in order that, although it be quite unintelligible, the general effect of the language may be given the pupils. I should not need to say here that only English should be used in conducting these early lessons if the contrary were not often the practice. French short vowels are learned simply by shortening the long ones. Phonetic symbols are of special service in teaching the nasalized vowels since the association with *n* and *ng* disappears and the pupils are told, or rather, shown, that the sound is the same as for the pure vowels except that part of the air passes through the nose. The semi-consonants in *lui* and in *oui* may be demonstrated in the formula *ɥ*:*y*=*w*:*u*. For the rest of the consonants the general rule that the tongue is forward (notably in *t*, *d*, *n*, flattened in *l*) is sufficient. The *l̥* and *r̥* (*article*, *maître*) account for the fact that these sounds disappear in rapid speech. However, it is in the treatment of "mute *e*" syllables, assimilation, elision, and linking that the phonetic script proves most useful. And it is most important in French that the learner realize that speech takes place in stress groups and not in words. For in no other language are the sounds so affected by the nature of those surrounding them, as well as by emphasis.

There can be no question but that the educational value of the study of French will be greatly enhanced by the use of phonetics

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in elementary classes. It cannot fail to foster in the pupil habits of precision and accuracy. If it be true that the student of language must first observe, then compare, and finally draw conclusions, our method will furnish excellent training for him. The hit-or-miss method that is often used to teach pronunciation does positive harm to the learner. Besides having the two disadvantages mentioned by Jespersen, that he can neither understand a native nor be understood by one, it gets the pupil into the bad habit of being satisfied with mediocre results. The satisfaction that comes from doing well a perfectly definite task will more than repay him for the new effort involved. It may be confidently asserted that the discussions in class will reveal a new and fascinating world in which he will take a keen interest. Furthermore, the learner must verify what he is told about the production of speech, he must do his own experimenting and rely upon the evidence of his own senses. We hear the statement in all quarters that our instruction is failing to develop mental power and vigor. Our students study year after year, adding, to be sure, to their store of knowledge, but not growing proportionately capable of clear, independent thinking. Phonetics will teach them that in languages we are dealing with sounds, not letters, an idea that will probably be new to them. As they see the inconsistencies and absurdities of both English and French spelling they will lose the feeling that the present systems have anything sacred about them, and whether a thorough, scientific, reformed spelling be adopted in their lifetime or not they will see the advantages of it, and will be able to take an intelligent interest in the discussions which are sure to become increasingly frequent and fruitful.

No one can transcribe a passage of either English or French into phonetic script without learning something by so doing that he could have obtained in no other way.[1] Thus the interest of the pupil cannot but be aroused by such an exercise. If he ever takes up the study of another language what he has learned about sounds in general will be of help to him.[2] Even the study of Greek and

[1] See the *Report of a Joint Committee on a Phonetic English Alphabet*, p. 16.

[2] Schweitzer says that it is most helpful to represent the different groups of letters which are pronounced alike in French *maille*, in German *mai*, *mein*, and in English "*mine*," "*lie*," "*bright*," by the same symbol. See *Revue Universitaire*, 1903, 2, p. 10.

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Latin will take on a new aspect. Who can tell to what extent interest in the classic languages might be stimulated if it were possible to discover their lost intonation?

But while the foregoing considerations are important and might be greatly developed, they are beyond the purpose of this paper. The only proof of the correctness of its contention lies in the results which are now being obtained and which are going to be obtained. "Of all the students of Teutonic Origin," says Rosset, "who learn French, it is certainly the Germans who, in spite of more numerous and greater difficulties, succeed most quickly in speaking correctly because both teachers and pupils have received a theoretical and practical phonetic education."[1] In conclusion I bespeak a fair trial for the phonetic method of teaching French pronunciation for the reasons I have given and which I may sum up as follows:

1. The old way of teaching does not give satisfactory results.

2. Mere imitation of the pronunciation of the teacher is not sufficient.

3. The only way in which the correct pronunciation can be taught is by an explanation of the formation of the sounds of French, based upon phonetic descriptions and comparisons, or rather contrasts, with the sounds of English.

4. Much time is saved by showing the combination of these sounds in speech by phonetic script in the beginning, the standard orthography to be learned later.

5. The educational value of the teaching of pronunciation by the use of phonetics is very great.

I do not think that Professor Jespersen is guilty of exaggeration when he writes: "We want to have some phonetics introduced into our schools because theory has convinced us, and experiment has proved to us, that by means of this science we can, with decidedly greater certainty, and in an essentially easier way, give an absolutely better pronunciation in a much shorter space of time than would be possible without phonetics."[2]

[1] Th. Rosset, *Du rôle de la phonétique dans l'enseignement des langues vivantes*, p. 6.

[2] O. Jespersen, *How to Teach a Foreign Language*, p. 143.

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GREEK AND LATIN IN THE SCHOOLS OF BELGIUM[1]

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Educational reform is a problem as old as Plato, and will continue to be a problem as long as education itself endures. When the problems cease troubling education itself will be a *caput mortuum*, and the need of reform will be greater than ever. There was an ancient pool, you will remember, of which it is written: "An angel went down at a certain season into the pool, and troubled the water: whosoever then first after the troubling of the water stepped in was made whole of whatsoever disease he had." The educational pool closely resembles that other: troubling angels are constantly needed in science, philosophy, and religion.

But the mere troubling is not enough: it must be done by one who has knowledge both of the slumbering depths and of the human ills that wait to be healed. Mere troublers—yes, we have had store enough of them from Protagoras and his fellow-sophists to their last descendants, pseudo-teachers of teaching, educational cubists, who plead for studies that strengthen the hand, not the head, for wood-carving instead of classics, burnt leather instead of literature, and agriculture instead of culture.

The movement for reform, so called, is not symptomatic of conditions in America alone. Neither are the classics the only object of attack. Everywhere, and in all departments of life, there is a revolt against accepted standards of education, of art, of morality. In education we have the prevalent fallacy that one subject of study is as good as another. In art we have Impressionists, Futurists, and Cubists, who look back upon the spirituality and sincerity of Rembrandt as things outworn. In morality the prevalent theory of Protagoras, that man is the measure of all things, and that hence each is a law to himself, leads to an individualism of conduct and belief which is incompatible with all

[1] Read at the Michigan Classical Conference, April 3, 1913.

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theories of organized society and destructive of the two cardinal virtues of character-building, obedience and loyalty. Matthew Arnold's definition of philistinism is truer of our day than his own: "In things of beauty and taste, vulgarity: in things of feeling and morals, coarseness: in things of the mind and spirit, stupidity—this is philistinism." Frederic Harrison has called it the cult of the Foul:

> The new craze under which we are now suffering is the cult of the Foul, or, to put it in Greek, it may be dubbed Aischrolatreia-worship or admiration of the Ugly, the Nasty, the Brutal. Poetry, Romance, Drama, Painting, Sculpture, Music, Manners, even Dress, are now recast to suit popular taste by adopting forms which hitherto have been regarded as unpleasing, gross, or actually loathsome. To be refined is to be "goody-goody"; gutter slang is "so actual"; if a ruffian tramp knifes his pal, it is "so strong." . . . . Painters are warned against anything "pretty," so they dab on bright tints to look like a linoleum pattern, or they go for subjects to a thieves' kitchen. The one aim in life, as in Art, is to shock one's grandmother.[1]

A part of the protest against the vulgarity and superficiality of the age is the vigorous defense of the classics in France, Belgium, and elsewhere. For all humanists believe it is a grander thing to be in spirit with the ages than in spirit with the age. Critics like Brunetière, Faguet, Poincaré, the mathematician, "Agathon," and Anatole France have been eloquent defenders of the ancient humanities because they realize that the history of the spiritual struggle and achievement of the human race is one, and the lines of demarkation between past and present fade easily away. Sane criticism looks with philosophic disdain upon time and space. It realizes that the thoughtful do not wholly live in any one time or country, but are the heritors of all the ages; that they are citizens of an ideal city which is nowhere upon this earth, and that they view all things under the form and aspect of eternity.

In Belgium the debate between the defenders of the classics and the pedagogists who would eliminate Greek from the schools, minimize Latin, and substitute modern languages and manual training is just now very keen. The bilingual character of the country and its intense commercialism threaten the stability of the

[1] Quoted by Grandgent, *Proc. Mod. Lang. Assoc.*, 1912, p. lv.

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classics in a marked degree. A comprehensive scheme of reform is set forth in two bulky volumes, called *La reforme de l'enseignement*, by G. Van Overbergh, the director general of higher education (Brussels, 1906). The last and best statement of the humanist's position is that by J. P. Waltzing, professor at the University of Liège, in an address to the Deliberative Council of Secondary Education, published at Brussels, in 1913. Before discussing the proposed reforms and the position of Professor Waltzing, however, I wish to say a word about the Belgian school organization.

Belgian secondary education (*enseignement moyen*)—the only part of the system with which we are here concerned—was organized by law in 1850. It is directed by a general inspector and two subordinates, one for the humanities (ancient and modern), the other for mathematics and the sciences.[1] The secondary schools comprise (1) the *athénées*, (2) communal colleges, (3) private colleges, (4) the inferior order of secondary schools.

1. The *athénées* are day schools for boys only and stand at the head of the secondary educational system. The head master and assistant masters must have the Doctor's degree from a university, while the assistants must have a university diploma. There are twenty *athénées* at present. The course of study is arranged in three parallel sections: Latin and Greek humanities; Latin humanities; modern humanities. Each section consists of seven classes, that is, seven years of study. Latin is given 6 hours a week the first year, 7 hours the second, and 8 the remaining five years, making a total of 53 hours. Greek is not taken the first two years but is given 5 hours the remaining five years, making a total of 25 hours. This is the classical program for the Greek and Latin humanities. In the section called the Latin humanities there is no Greek, and the equivalent in time is devoted to more mathematics and sciences. In the section called modern humanities there is neither Latin nor Greek, and the equivalent in time is devoted to commercial studies.

The diploma given upon the completion of the seven years admits the student to the universities, for which most of the students are aiming. The diploma of the Greek and Latin humanities,

[1] Cf. Monroe, *Enc. Educ.*, article "Belgium."

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however, is held in highest honor, admitting the holder to any department of the university. The diploma of the Latin humanities comes next, admitting the holder to the higher technical schools. The modern humanities diploma admits only to the commercial and consular sections of the Universities of Ghent and Liège.

2. Besides the *athénées* there are seven communal colleges, that is, schools under local government. These are the ecclesiastical schools.

3. There are eight private colleges.

4. The last class of secondary schools, called the lower order, has a three years' course of study devoted largely to manual training and commercial subjects. There are 88 such schools for boys and 40 for girls. Since neither Latin nor Greek is taught in them they need not concern us here.

We can gain some idea of the place of the classics in the Belgian schools from the following statistics. In 1908[1] the twenty *athénées* had a total of 5,890 students. Of these, 1,441 were enrolled in the Greek and Latin humanities; 490 in the Latin humanities; and 3,959 in the modern humanities. The seven communal colleges had a total of 727 students. Of these, 245 were enrolled in the Greek and Latin humanities; 40 in the Latin humanities; and 442 in the modern humanities. The eight private colleges had a total of 1,156 students. Of these, 1,034 were enrolled in the Greek and Latin humanities; none in the Latin humanities; and 122 in the modern humanities. Thirty-five per cent, therefore, of all these students were enrolled in the Greek and Latin humanities; 7 per cent in the Latin humanities; and 58 per cent in the modern humanities.

The latest statistics available, namely for the year 1910,[2] show 2,943 students in the Greek and Latin humanities; 624 in the Latin humanities; and 4,439 in the modern humanities. Therefore, 36.7 per cent were enrolled in the Greek and Latin humanities; 7.3 per cent in the Latin humanities; and 56 per cent in the modern humanities. In other words, the classics have been

[1] Monroe, *Enc. Educ.*, p. 348.

[2] Waltzing, *Le grec et le latin*, p. 37.

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holding their own, while the modern humanities show a slight loss. This result is especially gratifying to the lovers of the classics because the attempts to break down the classical tradition have been more persistent in Belgium than anywhere else in Europe, or in America, for that matter. When we remember that 42 per cent of the population speak Flemish only, and 38.2 per cent speak French only, it is apparent that the question of modern languages is one of vital concern in that busy little country. The economic condition of the country, furthermore, calls insistently for engineers, mining experts, and leaders in the industrial arts. The debate regarding the position of the classics in the secondary schools is, for this reason, a national one, wherein both sides are sincerely actuated by an intense desire for unity of spirit and national progress.

The programs of the reformers vary considerably in detail.[1] In general, they may be summarized as follows:

1. Eliminate Greek from the Greek and Latin humanities.

2. Reduce the time devoted to Latin; some would eliminate Latin altogether but the prevailing belief is that Latin should remain.

3. Insist upon a profound study of the native language and the national literature and make them the center of the new humanities.

4. Finally, devote more time to the study of foreign languages and geography.

It may be interesting to know that a protest against the elimination of Greek and the reduction or elimination of Latin was formulated and signed by more than two hundred University professors, among them mathematicians, naturalists, physicians, and men of rank, and by more than fifteen hundred professors of the *athénées*. The protest was sent to the Deliberative Council of Secondary Education. I wonder how many American university professors—not professing classicists—would sign a document like the following:

> Secondary education is passing through a crisis in our country which can escape the attention of no one. A plan of reform involving the entire program is being discussed, and the place assigned to the Greek and Latin languages and literatures is put in question. We do not wish to prejudice in any way

[1] *La reforme de l'enseignement*, I, 160–207.

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the decisions which will be made by the Committee on the Reform of the Humanities, but we believe it our duty to make known our opinion on the gravest question of education, the maintenance or the suppression of the Greek and Latin humanities. We do not at all deny that the organization of our education may be susceptible of change and progress; and in regard to the details of these reforms we reserve the freedom of action and belief of each of the signers, but we are all in agreement upon the following points:

We desire to affirm, first of all, our absolute faith in the efficacy of the Greek and Latin humanities for the education of the higher classes. We have the profound conviction that it is essential to the highest interests of our country, to its intellectual, aesthetic, and moral culture, that the youth of our schools, who, one day, are destined to be the élite of the nation, remain under the influence of the literary and artistic thought of the Greeks and Romans by the study of the classical languages and literatures. No respectable interest, the economic as little as any other, can be compromised thereby. We believe, on the contrary, that the abandonment of a system of education, consecrated by the experience of several centuries, would be retrogression for our country. We demand that this sacrifice be not rashly made, especially since the chief nations which are endeavoring to extend their economic influence, Germany and England, for example, refuse to decide this grave question definitely. The great danger lies in the utilitarian spirit which is hostile to all truly disinterested study, and which tends to reduce all the problems of education to a monetary value. The school ought, undoubtedly, to prepare the young man for life, but for the whole of life, and pitiable, indeed, would be the nation where to make money should be the only ideal, where all education should be reduced to the search for the best processes of self-enrichment, whether at home or abroad; where, in the desire for material expansion, the expansion of science and intelligence should come to a halt.

To this theoretical declaration we wish to add a demand of a practical character. Without concerning ourselves here with the details of a program of studies or the method, we demand that the program of the humanities continue to take account of the essential importance of the Greek and Latin languages and literatures, that it give them a number of years and hours commensurate with their eminent worth.[1]

The classics in Belgium have no better defender than Professor Waltzing. It is not my purpose to review in detail his masterly exposition of the aims and ideals of classical study. I shall merely enumerate some of the chief points of his argument. Many of them, you will perceive, have a distinctly national application. Professor Waltzing maintains that the study of Greek

[1] Waltzing, *Le grec et le latin*, pp. 7, 8.

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and Latin inculcates, first of all, a disinterested love of knowledge. The modern humanities, by both their content and method of instruction, are permeated with a spirit of utilitarianism. That, in fact, is their primary appeal in the minds of many educators. In the study of Greek and Latin, on the other hand, the student is accustomed to fasten his mind upon an object considered in and for itself, and not with reference to its practical utility (p. 47). À propos of this subject, M. Poincaré, the illustrious mathematician, says:

> It is by the contact with the ancient literatures that we best learn to turn aside from that which has merely a contingent and particular interest, to interest ourselves only in what is general, to aspire always to some ideal. Those who have tasted them become incapable of limiting their horizon; the external life speaks to them only of their daily interests, but they only half hear the voice; they are in haste to see something else; they carry with them everywhere the nostalgia for a better land.

And speaking of the disinterested love of knowledge, the same writer continues:

> This is the spirit that breathed upon Greece in the olden times and gave rise to poets and philosophers. There remains in our classical education something or other—I know not what—of this old Greek soul, something—I know not what—which always makes us look upward. And that is more precious in the making of a savant than the reading of many volumes of geometry [p. 48].

I have dwelt upon this argument because it is one upon which we need to insist in our own academic life. Knowledge for its own sake—may we never lose sight of that!

In the second place, the study of Greek and Latin inculcates the spirit of objective criticism. "The study of the ancient world," says Bazin, "gives us a truer idea of the present, and destroys that dangerous naïveté which leads beginners to believe that errors are progress, and that the braggadocio of the present is a new thing" (p. 50).

Third, the study of Greek and Latin develops the habit of independent work and personal judgment. The modern languages resemble each other in that they are all analytical, and are, furthermore, all the expression of the same civilization, developed since

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the Middle Ages. "The Greek and Latin words differ not only from the native language as words: the composition of the idea is different: it is necessary to analyze it before it can pass into the process of translation" (p. 51).

In the fourth place, the study of Greek and Latin creates a sense of tradition and a sense of evolution, things which the modern languages cannot give (p. 55).

The charge, so often made, that Greek and Latin possess no immediate utility, is met more specifically by Professor Waltzing. Greek and Latin, he maintains, are useful, first, because they afford an unparalleled intellectual discipline; second, because they are a direct help in the mastery of the modern languages. Translation from Greek and Latin is the best school for an exact, forceful style. Third, they are almost indispensable for a mastery of French. The decline of a proper feeling and knowledge of French on the part of the younger generation of pupils is a subject that has deeply concerned French writers and teachers. This aspect of classical study was treated, as will be remembered, by Dean Effinger.[1] "The decline of French," says Emile Faguet,[2] has been parallel with that of Latin, and here the principle *post hoc, ergo propter hoc*, seems to me to be true." Fourth, Greek and Latin are useful, nay indispensable, for developing the literary sense and a standard of taste. In discussing this subject, as frequently elsewhere, Professor Waltzing pays tribute to Professor Kelsey's *Greek and Latin in American Education* by forceful quotations. Fifth, Greek and Latin develop character. Sixth, they are directly necessary for scholars who investigate problems in history, philosophy, religion, literature, and the like, in that no true scholar is ever content with secondary sources. Seventh, they give us our technical vocabulary in all the sciences. And finally, they are useful as an accomplishment in and for themselves, for the adornment of the mind, as the French say.

Professor Waltzing would be the last to affirm that the case of the classics rests upon any one of these arguments. The evidence is cumulative, and the opposition has yet to prove that it is

[1] *School Review*, XX, 401–6.

[2] *Revue des deux mondes*, September 15, 1910.

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fundamentally wrong. By the opposition I do not mean the advocates of modern languages: with the thorough acquisition of modern languages I am in entire sympathy. The real opposition to the classics is the cult of the incompetent. In a recent address before the Modern Language Association,[1] Professor Grandgent maintains that the abandonment of the old tradition and the advocation of "all that concerns practical life" has ushered in a period which he aptly calls the "Dark Ages." I draw your attention to that masterly address by the quotation of a characteristic paragraph:[2]

> By this time it may have occurred to some of you that the Dark Age I am discussing is not the period extending from the fifth to the eleventh century, but a much nearer one. I suggest, indeed, that we alter the *Century* definition to something like this: "The Dark Ages, an epoch in the world's history, beginning with or shortly after the French Revolution, marked by a general extension and cheapening of education resulting in a vast increase of self-confident ignorance. It was induced by the gradual triumph of democracy, and will last until the masses, now become arbiters of taste and science, shall have been raised to the level formerly occupied by the privileged classes."

[1] *Proc. Mod. Lang. Assoc.*, 1912.

[2] *Ibid.*, pp. 57–58.

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THE CUMULATIVE EXAMINATION IN MATHEMATICS

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Consideration of the comprehensive examination in mathematics has usually encountered the very palpable objection that students are not likely by its means to do themselves justice.

This assertion is to some extent an indictment of present-day methods of teaching, for there can be little question that a comprehensive examination covering three or four years of study is the surest test of the value which a student has received from that study. But few high-school teachers, even granting the impeachment implied in their objection to the comprehensive examination, would, at the present time, be willing to make the passing of such an examination the *sole* criterion of a student's success in mathematics. Too many factors enter into the examination itself. Not the least of these is the general physical and mental condition of the student at the time when the examination is taken. Another is the difficulty of framing a set of questions which will make a reasonable allowance for lapse of memory. A student may readily forget not only theorems and formulae, but in particular cases even proper methods of attack, and still possess a fair knowledge of mathematical principles.

It is, therefore, proposed that the comprehensive (final) examination should not displace the traditional periodical examinations in the various branches of high-school mathematics, but should be *superimposed* upon them. In behalf of the comprehensive examination it is argued that when a student under our present system has passed an examination in algebra, for example, he regards the subject as finished for him. And when, consequently, in geometry or in mechanics, he finds it necessary again to apply algebraic methods, he is pained at the thought of calling up the ghosts of dead ideas. To the serious evils of the "finished subject" any

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mathematics teacher, particularly if he has taught the applied branches, can abundantly testify.

But alternatives for the accepted sequence of arithmetic, algebra, plane and solid geometry, and plane trigonometry have met with neither great success nor widespread approval. The reason is not far to seek. The best as well as the poorest of our students organize their knowledge, as they acquire it, largely upon a topical plan. The topical analysis, moreover, of our present mathematical curriculum is not lightly to be cast aside, nor easily to be modified. The arithmetical, the algebraic, the geometrical (Euclidean), and the trigonometrical methods of attacking a problem are usually impressed upon the student's mentality as distinct and separate entities. A mingling of these methods is sure to produce more or less confusion, and the pedagogical problem is to ascertain the extent to which this disadvantage may be offset in point of economy of time, of relative ease of performance, and of immediate applicability, by some arrangement other than the traditional sequence.

To take advantage of this "topical attitude of mind," and at the same time to prepare adequately for a comprehensive final examination, the author submits the plan of a series of cumulative examinations, extending over the three or four years of high-school mathematics. Such examinations, while distinctly charac teristic of the subjects just covered in the classroom, should each offer a considerable opportunity for the application of principles brought to light in the preceding term's work.

It is very true that the subjects above referred to are generally recognized to a large extent as mutually interdependent. But it cannot be lost sight of that geometry held its own for many centuries before formal algebra was developed; that many practical surveyors have pursued their calling with very little use for algebra or geometry or knowledge of those subjects; and that many students who excel in the higher branches of mathematics are woefully weak in the art of numbers. These and other considerations of a similar sort have served to maintain the compartment system of examinations, and corresponding compartments in the classroom. Can a single comprehensive final examination break

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down the walls, particularly if examinations in the various branches are kept wholly distinct? It is very doubtful. It is more likely, if the comprehensive college-entrance examinations are widely adopted, that its demands will be met by secondary schools with a special course preparatory for the examination itself.

Such a consequence would be lamentable, mathematical teaching being what it is in America today. Altogether too much time is wasted in a rear-end chase between high schools and colleges along the path of examinations. Papers of years past are subjected to the minutest "higher criticism" by high-school teachers for the benefit of their students. College-entrance examiners, believing that their examinations should be distinctly selective, often meet these efforts by greater intricacy in the problems they present on their question papers. It is not so very long ago that an eastern university distinguished itself by requesting aspiring candidates for the Freshman class to define the locus of a point equidistant from two skew lines!

The writer is informed that in foreign countries, where comprehensive examinations are the rule, special preparatory courses are in order, and are commonly to be found. But even in the Continental educational systems the evil of distinguishing between preparation for examinations and preparation for future work in mathematics has long been felt, and as a result, in recent years, emphasis upon the examination has given place to supplementary work in the various branches of mathematics. It should be remembered also that in Continental schools distinction between the various branches is not closely adhered to, as in America.

If the comprehensive college-entrance examination leads only to more examination bickering, it will do more harm than good. But if it brings high-school teachers throughout the country to a realization of the necessary interdependence of the mathematical branches, all will rise and call it blessed. It is to aid in this happy fruition that the cumulative examination is proposed.

However closely the four branches of high-school mathematics are of necessity interrelated, each has its own particular emphasis. And when these branches are *united*, as in many of the courses entitled first-year mathematics, or second-year, or third-year, the

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particular emphasis is generally lost, and essential topical distinctions are in this way lost sight of.

Such distinctions, when essential, are in point of *method*, rather than of subject-matter. *Arithmetic* proceeds from the known to the desired in linear fashion. As generally taught, it shows gradually increased knowledge at each step, and employs a narrowly limited number of principles in a particular instance. *Algebra* applies only a few more principles, and these for the most part in a well-defined succession; but in a particular problem it reserves any increase of knowledge until the final dénouement, the obtaining of the value of the unknown letter. The art of (Euclidean) geometry lies essentially in applying many principles simultaneously, or nearly so, to a particular case. This arises from the *two*-dimensional character of the subject and, in the opinion of the writer, makes it a much harder subject for the student than either arithmetic or relatively difficult algebra. It should follow algebra in point of time, for the sake of the advantage to be gained from the greater maturity of the student. Even trigonometry might well precede geometry, the geometric facts involved being taken for granted. The only really new element which trigonometry offers to the student, if method alone is considered, is the use of the tables.

The disregard of these points of emphasis has been responsible for the failure of various "spiral" or "sandwich" methods of dealing with the high-school mathematical problem. There is little likelihood of their prolonged success anywhere, except in certain courses in "shop mathematics" or "applied mathematics," where method is largely lost sight of in the importance of the result obtained.

But once the principle is accepted that the fundamental distinction between the mathematical subjects is a matter of method, the comprehensive examination may serve a very useful purpose in bringing to the front a phase of mathematical study which for many years has been largely neglected in this country. I refer to mathematics as an applied science, or to its essentially applicative character. The word "applied," when associated with mathematics, is generally interpreted as referring to the material sciences.

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It does, of course, so refer, but not absolutely. Each branch of mathematics has its applications in another or more of the *mathematical* branches themselves.

If the four branches, arithmetic, algebra, geometry, and trigonometry, are kept distinct in point of time, emphasis upon distinct methods can easily be preserved, and their relative intensity carefully regarded. But if each of these branches is regarded as a field for the application of those preceding, the whole mathematical curriculum acquires a unity which is genuinely organic, and which makes the comprehensive examination practicable and desirable; and the evil of the "finished subject" is thereby minimized. Added gains are that mechanics may be brought into the mathematical curriculum, where it belongs, and that the student applies his mathematics in the laboratory or shop, because it is his habit to look upon mathematics from that point of view.

Applications may, moreover, be distinctly anticipatory in character without any sacrifice of proper emphasis. A striking example of this is afforded in arithmetic, when this subject is included in the high-school curriculum, as it should be. There is no reason whatever why negative and fractional exponents, as well as the simpler cases of radicals, should not be included in such a course in arithmetic. Considerations of incommensurability, couched in precise language, had best be left to the college, or to the graduate school of a university. But careful attention should be given in arithmetic to the practical significance of various degrees of approximation to the values of radicals, and of π.

Moreover, the methods of teaching arithmetic now in great vogue in grammar schools, relying as they do upon resemblances between problems rather than upon the definite statement of fundamental principles, leave to the high school the formulation of those principles. This is best accomplished by the use of letters, sometimes called "algebraic numbers." Arithmetical operations upon literal expressions are easily comprehended, and the *general* character of such expressions may be strongly impressed upon the student. The construction of formulae is the next step, and the evaluation of formulae is easily understood to represent the application of a general arithmetical principle to a particular case.

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The parenthesis and the fraction line may be exploited quite extensively in arithmetic if time permits. Arithmetic may borrow from mechanics such topics as the lever, the wheel and axle, the pulley, and specific gravity. The application of various geometric laws is now quite generally taught in arithmetic under the caption "mensuration." This is distinctly anticipatory.

Algebra properly taught should of course place great emphasis upon the equation. But in high-school courses in algebra a larger proportion of time may well be devoted to a distinct exposition of the manner in which algebra aids in the solution of difficult problems in arithmetic. Skill in computation can be maintained by the frequent assignment of problems the date of which are in terms of large numbers or decimals. The *value* of algebra is nowhere more clearly shown than in the *transformation* of formulae.

Algebra applied to geometric problems may anticipate certain well-known laws of geometric figures in a way which adds greatly to the interest of the subject. If algebra is presented in high school from this point of view, even at the sacrifice of artificial intricacy, it gains greatly in life and tone. An examination paper in algebra, then, can easily be made so as to test the student's arithmetical ability as well as his familiarity with algebraic method.

As the *equation* is distinctive of algebra, so is the *formal demonstration* distinctive of geometry. This method of procedure is too difficult for the first year in high school, and may well be kept for the third year, if the curriculum permits. But geometry affords an excellent field for the application of algebraic methods, in spite of the centuries-old tradition of the inviolability of Euclidean form. The status of twentieth-century geometry teaching is rather dubious. Teachers are well, sometimes too well, aware that the axioms and postulates of Euclid lack the fundamental stability which was formerly ascribed to them (though it is doubtful if Euclid himself was similarly minded toward them). It is known now that the beginnings of the logic of plane geometry lie far back of the first proposition of any standard textbook. The obvious inference, then, is that it might be well to assume a much longer list of postulates and so dispense with many hours of drudgery spent in the mastery of propositions which are practically self-

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evident to the student. This step once taken affords an opportunity for even greater precision in the definition of terms and in regard for the logical sequence of the parts of the subject, with time to spare.

How shall this time be spent? The answer is immediate: in original exercises. It is the *character* of these exercises which has the greatest interest for mathematical teachers nowadays. It was perfectly natural, of course, that the first of these exercises to be placed before the students should have the character of additional theorems in *Euclid*. Overlooking the fact that Euclid regarded the *sequence* of the theorems as of equal, if not of greater, importance than the manner of the particular demonstration, teachers have inflicted these "riders" mercilessly upon their classes, making theorems and problems more and more intricate, without regard to their proper arrangement, until geometry is frequently reduced to little more than a puzzle book.

Now the complete abandoning of Euclidean method, which seems to many a desirable step, is at least a bold one, considering the twenty-three hundred years during which Euclid has held sway. It may well be asked whether every student should not become familiar with plane geometry as the most marvelous example of human logic ever set forth, so wonderful that Plato regarded it as divine. But two facts should not be overlooked. One is that, in imposing upon demonstrative geometry the modern scientific mania for classification by means of external appearance, we have already damaged the beautiful structure of Euclid very seriously; and the second is that the nicety of argument so characteristic of Euclid always seems to a student a waste of good time, coming as it does *between* the comparatively slipshod methods of arithmetic and algebra, and the immense sweep of college mathematics.

This solution of the difficulty is offered: that the propositions presented should be manipulated with traditional care; but that their number should be reduced to a minimum; that the time thus saved should be devoted to algebraic exercises based on these theorems, as they come, with numerous examples involving considerable computation; and that the final examination in geometry

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should demand all three of the distinct methods thus brought into the course.

There is, of course, no logic whatever in the separation of solid and plane geometry. This is done merely because the combined course is too long for one school year. Solid geometry should therefore be treated, under the proposed plan, as plane geometry is treated.

It should be noted, moreover, that many familiar theorems of geometry are in their demonstration closely associated with algebra. These theorems, usually grouped under the heading "numerical properties of triangles," are established much more easily under the form of algebra than under the traditional Euclidean notation. The problem of the determination of the "Golden Section" and that for the approximate computation of π afford admirable illustrations of the application of the principles of quadratic equations. The transformation of a square into a rectangle under given dimensional relations offers a striking comparison of algebraic and geometric methods; and the association of algebraic graphs with geometric loci, as well as that of trigonometric functions with similar right triangles, brings algebra and geometry into direct relation. The algebraic proof of Hero's formula deserves more attention that it usually gets.

The subject of trigonometry is especially significant to the present discussion in that it affords in itself a striking illustration of the way in which the whole high-school course might well be presented. Here arithmetic, algebra, and geometry are all used freely and without prejudice as to their comparative merits. It is the opinion of the writer that trigonometry is fitly the apex of the high-school course; and it is his experience that students who take this subject find it the most satisfying of all of their high-school mathematics. It seems unfortunate that not more than a half-year can usually be devoted to this valuable work. If it were extended on the one hand to include De Moivre's theorem, and on the other to include a wide range of practical applications, there would be little of the preparatory mathematics which it would not exemplify.

It is undeniable that such methods as have been suggested,

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though vastly more interesting, would be somewhat more difficult for the student than the present manner, and would require correspondingly greater skill on the part of the teacher. The percentage of students' failures might increase somewhat at first. But the writer contends that this is a part of the cost of the Comprehensive Examination.

Suggested Questions for Cumulative Examination Papers

Algebra through progressions

1. Show that a number is divisible by three if the sum of its digits is divisible by three.

2. Given

$$k=\frac{l_1-l_0}{l_0(t_1-t_0)}.$$

Solve for l_0.

Find l_0 when $l_1=39.27$, $t_1=99.6$, $t_0=0.4$, $k=.000011$.

3. Find by a short method the value of each of the following

a) $(38\frac{3}{4})^2-(17\frac{1}{4})^2$.

b) $\sqrt{363}-3\sqrt{\frac{1}{3}}-5\sqrt[4]{9}$.

c) $\sqrt{h(2r+h)}$, where $r=4000$, $h=\frac{1}{10}$.

(Obtain results correct to the second decimal place.)

4. Derive a general formula for obtaining the principal which will amount to a given sum at a given rate in a given time, at simple interest. And find the principal when the time is sixty-four days, the rate 4 per cent, and the amount $1,540.

5. Find the dimensions, the volume, and the diagonal of a rectangular solid if three faces about one corner have areas of 108 sq. ft., 264 sq. ft., and 198 sq. ft., respectively.

6. If $y=a+\frac{b}{c+x}$, find a, b, and c, if $y=41$ when $x=6$, $y=31.91$ when $x=2.1$, and $y=26.45$ when $x=5.4$.

7. A man pays an annual premium of $164.37 for 20 years on an endowment life insurance policy. What should be his credit with the insurance company, allowing simple interest at 4 per cent on his payments but disregarding insurance cost?

8. At each stroke an air pump withdraws one-tenth of the total quantity of air under a bell jar. If there were 400 cubic inches of air under the bell jar originally, what portion of the original contents remains after eight strokes?

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PLANE GEOMETRY

1. Find the number of degrees, minutes, and seconds in each angle of a triangle if the angles are in the ratio of 1, 5, and 7.

2. Prove a law for the sum of the interior angles of a polygon of n sides, and find the value in degrees, minutes, and seconds of each angle of a regular polygon of 48 sides.

3. Illustrate geometrically the algebraic product of $a+b$ and $a-b$ where a and b are lines.

4. Derive a general formula for the number of degrees in the arcs intercepted by (1) two tangents to a circle which make with each other an angle of $a°$; (2) the three sides of an inscribed isosceles triangle whose vertex angle is $b°$.

5. Show how to divide a line in extreme and mean ratio, prove your construction, and find correct to three decimal places the value of the greater segment if the length of the whole line is 10 units.

6. Find the area of a trapezoid if the bases are 15 and 20, and the legs are 29 and 30. State the geometric theorems involved in the solution of this problem.

7. Construct three mutually tangent circles, having given their three lines of centers; and find the diameters of three such circles, if their lines of centers are respectively 4, 5, and 6 inches.

8. Prove that the areas of two similar triangles are proportional to the squares of homologous lines, and find the distance from the vertex of a line drawn parallel to the base of a triangle of altitude 20 which divides the triangle in the ratio of 3:5.

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EDUCATIONAL NEWS AND EDITORIAL COMMENT

The department of Educational News and Editorial Comment was begun in the December, 1912, number of the *Review*. Dr. Charles H. Judd, in a signed note announced "this department will be conducted, unless otherwise specifically indicated, by the writer of this note."

The *Review* desires to announce that Dr. Judd will continue to contribute extensively to the department. To his comments there will be added the contributions of the other editors. Moreover suggestions as to suitable news items, sent by anyone interested in current educational problems, will be heartily welcomed. Space will be reserved in addition for appropriate comments and discussions signed by contributors. The *Review* again expresses the hope that through this department there may be stimulated helpful discussions in regard to educational movements of the day. All communications should be addressed to the managing editor, Room 206, Emmons Blaine Hall, University of Chicago.

R. L. LYMAN

REORGANIZATION OF THE DETROIT CENTRAL HIGH SCHOOL

In an effort to provide adequately for the complicated needs of 2,500 pupils, Detroit has this year made radical changes in the organization of the Central High School. The most important innovations are two in number. First, the boys and girls will recite in different classes. This plan seems to be based upon the arguments usually given for segregation. The outcome of segregation in a public high school will be watched with interest by many principals who are restive under the petty but irritating happenings of coeducation.

The second change is even more radical. Instead of an assembly room for each grade as heretofore, the entire school will be divided into "houses," each house containing pupils from all four grades. Twice a year an incoming class of five hundred will be distributed among the various houses. Each house principal will then deal with only sixty to seventy newcomers. Moreover, the first-year pupils will be in touch with schoolmates from all grades. It is hoped in this way that the pupils may get the perspective of the entire course and the spirit of the whole school. The house plan seems to be an experiment in the high

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school somewhat similar in aim to the "tutorial groups" now being tried in various colleges.

The Central High School appreciates that these new plans will require patience, care, and decision on the part of the faculty. There is no doubt that Detroit Central, always a leader among metropolitan high schools, will give to these innovations a thorough trial. The plan ought to stimulate individual students, raise industry and scholarship, and increase the number who endure to the end.

THE ADMINISTRATION OF VOCATIONAL SCHOOLS

It is generally admitted that one of the most important questions regarding the vocational education movement now under consideration is whether such education shall be provided by a separately organized system of schools, administered by a different staff of officers acting under authority granted by special legislation, or whether the scope and purpose of the present public educational system shall be so widened as to minister to the educational needs of all citizens by the addition of new departments, and the development of a more complex and highly differentiated organization.

It is within the bounds of truth to say that, while this question has become acute in only a few states, it is of national importance. Indications are not wanting to show that a strongly developed movement is under way throughout the country to secure, wherever possible, the establishment of the separate system. In fact, while we are not able to estimate its strength, there is no doubt that opposition was developed against the Page Vocational Education Bill, in some quarters, because it was felt that it tended too strongly toward the separate school. We say this although we do not concur in this opinion and have always supported the Page measure.

In view of the above facts we are led to comment on the following resolutions prepared by one hundred officers, superintendents, and teachers assembled in the First Institute and Conference for Continuation Schools, Madison, September 22, 1913.

To Whom It May Concern:

WHEREAS, There has been more or less irresponsible utterance within and without the state with reference to the satisfaction and efficiency of the law that provides for continuation schools for the self-supporting wage-earners of the state of Wisconsin, and

WHEREAS, It is desirable once and for all to state what are the facts with reference to this matter, and

WHEREAS, It seems reasonable that a representative body consisting of

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school officers, superintendents, and continuation teachers, from all of the cities of Wisconsin maintaining such schools, are wholly familiar with conditions that exist, and

WHEREAS, It is becoming for such a gathering to declare what the conditions are, therefore be it

Resolved by the one hundred fifty officers, superintendents, and teachers assembled in the First Institute and Conference for Continuation Schools, that—

"We find on the whole that the duplex system, or two boards, is advantageous to the administration of both lines of school work—generalized school work and specialized school work."

Resolutions passed enthusiastically by unanimous standing vote.

C. P. CARY
State Superintendent
Presiding Officer

M. J. NORRIS, *Secretary*

While every true friend of popular education will rejoice at the success of Wisconsin's effort to inaugurate a state-wide system of vocational education, there is danger that this enthusiastic indorsement of the Wisconsin plan by Wisconsin teachers will be urged by some as conclusive proof of the superiority of the separate system referred to above. No greater mistake could be made than to put such construction on these "resolutions."

In the first place it should be noted that, by the terms of the resolutions, Wisconsin's purpose has been to provide "continuation schools for the self-supporting wage-earners of the state." Important as this phase of vocational education may be, the establishment of continuation schools is a relatively simple matter compared to the carrying-out of the programs of such states as Massachusetts, New York, New Jersey, Pennsylvania, and Indiana, or even the realization of the plans proposed for Illinois. In these states, in addition to continuation schools, the plans contemplate full-time day schools, complete vocational departments in existing high schools, a liberal utilization of the part-time co-operative scheme involving agreements between employers and the existing schools, some of which plans reach well down into the compulsory school period. In no one of these states is it necessary for the young citizen to become a "self-supporting wage-earner" before he can receive the benefit of state-aided vocational education. We would in nowise minimize the inestimable value of the continuation school, but we must insist that a plan of state administration which proves eminently satisfactory for the establishment of such schools might be ineffectual in promoting some of the other and more complex types of vocational education.

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In the second place it should be recalled that what is referred to in the resolutions as the "duplex system" is not necessarily the same as the "separate system" so forcefully advocated in some quarters. As the industrial school board in any Wisconsin city is appointed by the regular school board, and as its members may be, and in many instances actually are, the same men and women as constitute the school board, there is sure to be a unity of interest which may not result from, and certainly is not invited by, the plan of a separate board appointed by the mayor or other high authority.

What is gained by the Wisconsin plan is a separate budget and freedom from the restraints of old, conservative, and inappropriate rules and regulations. Both these highly desirable advantages might, under proper legislation, be secured to a subcommittee of any existing school board in the land. On the other hand, friction and duplication of effort, which are unavoidable under the duplex system, would be eliminated by retaining the single administrative authority. That such friction has been felt in Wisconsin cannot successfully be disputed.

In the third place may we not overestimate the importance of the opinions expressed in these resolutions? It should be remembered that we have here the expression of a group of men the large majority of whom have had no opportunity whatever to observe the working of any other plan than the one under discussion. Their statement is that they find the plan good, and everyone will heartily agree with them. That the plan is *better* than some other, or that it is the *best possible plan*, they have not said nor are they competent to judge since their experience is limited to the "duplex system" which has been in operation two years or less. Under the circumstances one can hardly imagine how the resolutions could have been passed in any other way than "enthusiastically by unanimous vote."

After all, it is a question of relative values in which we are interested. No advocate of the "unified system" has denied that the dual system has advantages, and most are willing to admit that greater *immediate* success for the new movement would probably be achieved if it were possible to eliminate all traditional pedagogical restraints and limitations. But it cannot be said too often or too emphatically that the greatest value of the vocational education movement will be its ultimate effect on the general system of public schools. Even today it is to be noted that in those places where both types of education are administered by the same school board a vitality has been observed in the older schools which is full of promise that the much-needed educational reorganization is near at hand.

F. H. L.

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STATE CERTIFICATES FOR PROFESSIONALLY TRAINED COLLEGE GRADUATES

According to Updegraff's *Bulletin* (Bureau of Education, No. 465) issued in 1911, a large number of states then placed a special premium upon professionally trained college graduates by granting them certificates to teach without requiring an examination or previous experience in teaching. Most of these states were in the central or western part of the country. While it is difficult to determine the exact practice in all states from the data provided, it would appear that the following twenty-seven were included in those which granted certificates upon the basis mentioned.

Atlantic Coast States: New York, Pennsylvania, Rhode Island, West Virginia.

South Central: Arkansas, Kentucky, Louisiana, Tennessee, and Texas.

North Central: Iowa, Kansas, Michigan, Minnesota, Nebraska, North Dakota, South Dakota, Wisconsin.

Western: Arizona, California, Colorado, Idaho, Montana, New Mexico, Oregon, Utah, Washington, Wyoming.

These facts indicate that in these states the public authorities consider college training, which has included professional work in departments of education, especially important in employing teachers. In some states many of the boards of education will not employ a teacher unless he has had professional training, and preference is very generally given to candidates with professional training, even where it is not required. The result is that in many of the states practically all of the students in the universities who expect to teach take the required amount of work in the department of education as a matter of course.

The amount of professional work required for certificates varies from about 6 to about 20 semester hours. The most common requirement is 15 semester hours. The subjects to be included in the training vary with different states. The following are mentioned: general and educational psychology, history of education, school organization, administration and management, European school systems, methods, observation, practice teaching.

In contrast with the advanced recognition of professional training which prevails in the states listed above, there are still a number of states in which no recognition is given. In some states, in fact, there is no central scheme of state certification, but county certificates based on examinations set by county authorities are still required. Probably a number of states, however, have taken advanced steps since the publication of Updegraff's report. One example is Illinois, which, in 1911, had a very antiquated scheme of county examinations for teachers without

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experience, and state examinations for teachers with experience and with no provision for granting certificates without examination to professionally trained college graduates. The state legislature in 1913, however, took a long step forward by passing a bill which provides for the granting of interchangeable county certificates without examination or previous experience to graduates of normal schools and colleges. In the case of high-school certificates the law reads as follows: "*Provided, however*, that graduates of a recognized normal school, college, or university may offer, within three years after graduation, certified credits in lieu of examination in the above subjects accompanied by faculty recommendations of ability to teach in high school." The law is indefinite in its prescriptions and will doubtless be improved so as to define more specifically the amount and character of the professional work required, as is done in Colorado, Iowa, Minnesota, North Dakota, Oregon, Wisconsin, and some other states. The baneful influence of special local interests, which has so generally retarded the development of education in states bordering on the Ohio River, is shown in the provision in the Illinois law "that nothing in this act relating to county certificates shall be applicable to counties having a population of five hundred thousand or over."

S. C. P.

RESPONSIBILITY FOR PUPILS ON THE RAGGED EDGE

From an interesting investigation reported in the current number of the *School Review*, C. R. Rounds and H. B. Kingsbury find that approximately 20 per cent of high-school pupils fail in English and 25 per cent fail in mathematics. The investigators reach the conclusion that those high schools are making the best showing which are employing some special method or methods of helping backward pupils. They especially affirm that "one factor must constantly be brought into the reckoning and that is the teacher behind the desk."

It is well to have the point thus emphasized that the teacher's responsibility is greatest with those of his pupils who hover around the ragged edge. Moreover, it is to be remembered that the fate of this group of doubtful ones, just above or just below the passing mark, is largely determined by the teacher himself. This can be illustrated easily in the courses in English, history, or language. In these classes the teacher is compelled to rely in a large degree upon general impressions of the pupil's work in estimating what grade he ought to give. Say that a class has been working on *Macbeth*. John Jones is on the ragged edge. If given a mark of 74 he will fail; if given 75 he will pass.

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The teacher has been irritated perhaps by John Jones, who is sometimes late with his written work; or maybe the instructor is especially kind-hearted toward the lad because of his clean, gentlemanly bearing or something of the sort. Indeed, a dozen considerations other than the real merits of John Jones in the study of *Macbeth* may determine in the teacher's mind the difference in grade between 74 and 75. It is because of this margin of judgment on the part of the teacher that he needs to exercise great care in dealing with the pupils whose records lie near the passing mark.

We have known teachers obsessed by the error against which Mr. Rounds and Mr. Kingsbury give warning: namely, that excellence in teaching can be estimated by the relatively large number of low marks an instructor gives. Such teachers sometimes deliberately look over their class lists to find those of their doubtful pupils whom they can fail with the least inconvenience to themselves. Some teachers consult the records of pupils in other courses on the theory that if the pupil has failed in one course it will be all right to fail him or almost fail him in another. As a matter of fact, if a pupil is doing mediocre work in all his other courses he is the very one whom the teacher ought to study with great care, to see if it is not possible through his own classes to give the lad a stimulus to do better in all his other work.

There is, moreover, a real danger if a principal attempts to bring pressure on his teachers to let more pupils pass. If there are 25 per cent of failures in mathematics it is relatively easy to reduce that percentage to 15 per cent through vigorous advice given by the principal. But this easy method of making a better showing may in no way mean that mathematics is better taught or that backward pupils are being more effectively assisted. The danger is that it may mean merely that the individual teachers are easing up in their judgments, that they are becoming too lenient. The principal can guard against this danger by urging his teachers to give heartier personal assistance to that group of pupils who will always hover about the ragged edge.

A safe rule for any teacher to follow when dealing with mediocre pupils is to remember that in the high school, at least, it is far better to err toward leniency rather than toward severity; it is far better to keep a boy in school with a mark of 75 in Sophomore English than it is to drive him out of school with a mark of 74 in the same course.

DEPARTMENT OF SUPERINTENDENCE

The next meeting of the Department of Superintendence will be held at Richmond, Va., February 23–28, 1914. The headquarters'

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hotel will be the "Jefferson." The evening meetings of a general character will be held in the City Auditorium, which has a seating capacity of 4,000. The general day meetings will be held in the High School Auditorium, seating 1,300 people.

The "Jefferson" is located about midway between the business center and the City Auditorium. The high school is located one block off Broad Street, the chief retail street. The Murray Hotel and the Hotel Richmond are only two blocks from the high school.

COMMITTEE FOR EDUCATIONAL CONGRESS AT EXPOSITION

Dr. Joseph Swain, president of Swarthmore College, and president of the National Education Association, today announced the names of ten men who will complete the committee which will have general charge of organizing a special educational congress at the Panama-Pacific Exposition in 1915. Besides all former presidents of the National Education Association, past and present United States commissioners of education, the executive committee of the association, *ex officio*, the ten other active members appointed by Dr. Swain are: Stratton D. Brooks, president of the University of Oklahoma; Martin G. Brumbaugh, superintendent of schools, Philadelphia; John W. Cravens, registrar, Indiana University; David C. Johnston, Winthrop Normal and Industrial School, Rock Hill, N.C.; Charles H. Keyes, president of Skidmore School of Arts, Saratoga Springs, N.Y.; A. C. Nelson, of Skidmore School of Arts, Saratoga Springs, N.Y.; A. C. Nelson, state superintendent of public instruction, Salt Lake City; J. P. Phillips, superintendent of schools, Birmingham, Ala.; Henry S. Pritchett, president of Carnegie Foundation, New York City; Frank Strong, chancellor of the University of Kansas; Benjamin Ide Wheeler, president of the University of California.

HIGH-SCHOOL CREDIT FOR MUSIC STUDY

A bulletin issued by J. W. Shideler, superintendent of the Junction City, Kansas, Public Schools, announces that high-school pupils taking music outside of school are given credit. One unit a year is granted on the basis of thirty-two credits for graduation. The requirements are as follows:

1. For instrumental music (piano), the following points will be emphasized: (*a*) bodily poise—position of hands, (*b*) correct rhythm, (*c*) tone coloring, (*d*) correct pedaling, (*e*) phrasing, (*f*) expression. (Violin) omit latter part of (*a*) and (*d*) and substitute correct handling of bow.

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2. For voice culture: (*a*) vocal poise, (*b*) tone quality, (*c*) tone placement, (*d*) articulation, (*e*) pronunciation, (*f*) smoothness of vocalization, (*g*) phrasing, (*h*) expression, (*i*) interpretation.

3. Application for such credit must be made by parent and must be accompanied by written recommendation of private teacher.

4. No pupil will be accepted who takes fewer than one lesson a week and practices fewer than six hours a week.

5. The teacher must report to the superintendent the first of the following months: October, December, February, April, and May 15, the character and grade of the work, the progress made by the pupil since the preceding report, and the compositions studied with remarks concerning the scope and quality of the work done on each composition. The teacher will report a grade in per cent on the basis of 75 per cent for passing work. These reports are to be made in duplicate, one signed and one unsigned.

6. The parent will report to the superintendent the first of every month the number of hours of practice of the pupil.

7. The pupil will be required to pass an examination at the close of the year, under a board of examiners appointed by the superintendent. The examination will be planned on the basis of the unsigned reports of the teacher.

This experiment, safeguarded as it is by careful provisions against lax endeavor by the pupils, seems to be a sensible means of preventing the risk of overworking on the one hand and on the other of postponing musical training until too late. A serious and thorough study of either vocal or instrumental music is today recognized as a valuable part of education. The schools do well to encourage it in every legitimate way.

THE RAPID GROWTH OF NIGHT SCHOOLS

The public press gives evidence that the spread of night high schools and grammar schools has this year been unprecedented. The courses of such schools in general fall into three large groups: first, in cities of large foreign population, teaching English chiefly to adults; second, helping boys and girls who have left school before finishing their regular courses; and, third, offering practical instruction in commercial branches, household arts, and manual training. A fourth group of courses is designed to give students assistance in mastering a trade. The movement for the night school in any or all of its branches is but part of an increasingly intelligent endeavor to make school equipment serve communities as widely as possible. If a $100,000 manufacturing plant can run at night with a second force of operatives, a costly educational

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plant certainly ought not to be idle when there is crude material to be turned into finished product.

From a very large number of press notices the following are selected as indicative of the general trend of the development in night schools. Rochester, N.Y., reports 185 courses, half of which are new this year, given in thirteen evening schools. In Kansas City, Mo., an interesting innovation is made by a night course in practical gardening for beginners given in the Central High School. "Such subjects as soil chemistry are allowed to wait awhile," says the principal. "What we aim at is to enable any householder with a little tract of ground to raise the maximum amount of vegetables and thus reduce the cost of living. In the same rudimentary, practical way we will teach flower gardening." In Cincinnati the courses in the night high schools lead directly to diplomas recognized by the University of Cincinnati and by various colleges. These courses are given in addition to the regular classes in manual training, domestic science, and commercial branches. In Omaha three night high schools open their doors with various elementary schools assisting. Omaha grants diplomas for efficiency. Denver and Pittsburgh announce plans for wide enlargements. In the latter city the school authorities undertake to establish new centers wherever requests are made and an attendance of one hundred guaranteed. Des Moines, which established five years ago one of the earliest night schools in the West, this year is introducing co-operation with the Y.M.C.A. and business colleges of the city. In order to keep the night work distinct the various agencies, however, co-operate in an advertising campaign. Detroit enrols 5,000 pupils and has 130 instructors working in twelve buildings. The regular high-school studies are given in four buildings, while grade schools are open for foreigners. In Detroit the various nationalities are being segregated. Groups of Germans, Hebrews, Italians, Greeks, Poles, Hungarians, whose members have similar problems in the learning of English are being taught together. In Chicago thirty-three buildings this year are open for night-school work. The classes meet four nights a week. Last year in the Chicago night schools 10,500 attended the commercial, industrial, and household courses, 11,200 foreigners studied English, a total of 27,900 students attending the Chicago evening schools. In this city a registration fee of one dollar charged at the beginning of the work is returned to those who attend three-fourths of the total number of sessions.

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BOOK REVIEWS

Applied Physics. By V. D. HAWKINS. New York: Longmans, Green & Co., 1912. Pp. ix+199.

A comprehensive book, one in which the author has kept aloof from the erg, dyne, and other terms which do not particularly help the "average" high-school pupil and coupled the book and student to the common, everyday phenomena of life. It is a book in which one will become interested because he is brought in touch, quickly, with those fundamental principles of physics which have already arrested his attention. The author does not claim to have covered all the physics ground in this text, but has left to the live, well-informed instructor that interesting and helpful phase of the subject, the illustrative experiment.

Physical Laboratory Guide. By FREDERICK C. REEVE. New York: American Book Co., 1913. Pp. x+182. $0.60.

In this guide there are twelve chapters, nine being devoted to a very complete discussion of the sixty-six experiments, the other three containing notes on the experiments and having a very complete list of physical constants used in the book; the experiments are well selected and cover the requirements for entrance to college. The directions for performing each experiment are clear and complete, thus economizing the time of both teacher and pupil. A most valuable feature is the scattering of many questions throughout the book, the answering of which will help fix in the pupil's mind the principles brought out in the experiments. The book can be used with any good physics text. There are but sixteen drawings; more would have been helpful to the pupil. The composition and press work are excellent and the mechanical work equally good.

New Analytic Geometry. By PERCY F. SMITH and ARTHUR S. GALE. Boston: Ginn & Co., 1912. Pp. x+342. $1.50.

Higher Algebra. By HERBERT E. HAWKES. Boston: Ginn & Co., 1913. Pp. v+222. $1.40.

Elementary Plane Geometry. By JOHN C. STONE and JAMES F. MILLIS. Boston: Benj. H. Sanborn & Co., 1910. Pp. ix+252. $0.75.

Though the *New Analytic Geometry* is planned to provide an adequate drill in the use of co-ordinates and in the employment of analytic methods, it meets in many respects the requirements for a good practical course. The

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five forms of the equation of the straight line are derived in a way to be easily grasped by the student, and there is an abundance of problems for drill. However, it is a simple matter to show the students that only one form, $y=mx+b$, is really needed to solve all the problems. It seems a waste of time to plot many curves of the second degree by locating points, when the curves can be readily sketched after their properties have been studied.

The chapters on transcendental curves and equations, polar co-ordinates, and parametric equations and loci are of considerable value for reference, and as far as time permits in a short course they furnish good material for work. It is so difficult to find practical problems having a real connection with analytic geometry that the chapter on functions and graphs is very welcome. These problems, moreover, serve as an excellent introduction to the calculus. There is no trouble in having students find tangents to curves by the $\frac{dy}{dx}$ method, and immediately make application in finding maximum and minimum values.

The derivation of the equations of the conic sections by using a separate definition for each curve is undoubtedly the easiest for the student; and in following this plan and giving an excellent discussion of the properties of the curves and in giving the methods of mechanical construction the authors are to be commended.

Solid analytic geometry occupies eighty-seven pages, and the presentation is adequate for use in the calculus. The chapter on empirical equations at the close of the book should not be overlooked by an instructor. This subject is just beginning to receive the attention it deserves.

The *Higher Algebra* covers the ground of the usual course in college algebra, and is amply sufficient for future work in engineering and science. An introductory review prepares for the work that follows. The second chapter, Functions and Graphs, treats the subject in a very practical way and furnishes the basis for considerable graphical work in the later chapters. The quadratic equation is treated with considerable thoroughness, and complex numbers are given a more extensive discussion than most textbooks accord them.

The treatment of the theory of equations is noteworthy because of the omission of unimportant details, the clear presentation of the essential principles, and the use of graphical methods. Instead of a long chapter on undetermined coefficients the one important topic, partial fractions, is given. It is doubtful if the average student knows much about infinite series after a study of the subject; but it would seem possible for him to get a fairly good grasp of the subject from this book. The explanations and illustrations are clear and convincing, and only the simplest cases are considered. This textbook will, no doubt, have a wide use in colleges and technical schools.

The Stone-Millis *Plane Geometry* is one of the best geometry texts of recent years. For the most part complete proofs are not given, but enough suggestions are made to enable the pupil to complete the proof for himself. This gives ample drill in solving original exercises and leaves much time for the

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applied problems. Teachers who desire the traditional original exercises will find plenty of them, but of greater value are the many simple problems of geometry that have been gathered from the various practical fields of daily life. These applied problems awaken the interest of the pupils in the study of geometry, and supply the motive for effective study.

In the early pages formal demonstrations are not attempted but a concrete basis is first obtained through measurements, constructions, and the like. These drawings and constructions are made not alone with the Euclidean ruler and compasses; the pupils learn to use the protractor and triangle as in practical work. Quite a number of geometrical exercises are given for algebraic solution, in order to keep alive the pupils' knowledge of algebra; and as an application of similar triangles, angle functions are introduced and used to compute heights and distances. In many ways this book meets the present-day demands for methods of instruction which will prepare pupils for their work after leaving school.

H. E. COBB

LEWIS INSTITUTE
CHICAGO

A Laboratory Manual for Physical and Commercial Geography. By R. S. TARR and O. D. VON ENGELN. New York: Macmillan, 1913. Pp. vii+214. $0.25.

A Guide for Laboratory Geography Teaching. By O. D. VON ENGELN. New York: Macmillan, 1913. Pp. iii+20.

These publications are auxiliary to the *New Physical Geography* recently published by Professor Tarr. They are designed to encourage and make possible the use of the laboratory method in the study of geography in normal schools and colleges. The *Guide* is for the use of teachers, explaining questions arising in the use of the *Manual*. The *Manual* contains fifty-six exercises covering a large range of geographical topics grouped under six heads: the world as a whole, in which instruction is given in map-making; minerals, rocks, and soil; the making and interpretation of topographic maps; the geography of the lands; the ocean; and the atmosphere. The apparatus required for these exercises is carefully described, and is comparatively simple. The cost is estimated as between a minimum of $40 and a maximum of $115 for a class of ten students. There is no doubt as to the skill with which the exercises have been arranged, and the comprehensive understanding of the subject upon which they are based. It is probable that the individual experience of the authors has given them their shape, and that other teachers might find themselves somewhat cramped by the mass of suggestion and the rigidity of the form, but it is not probable that at the present time many people in the country have worked out a system by any means as comprehensive, and doubtless these publications will do much to call attention to the possibilities of laboratory

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method and to encourage others, if not to use the particular manuals, at any rate to undertake similar experiments. The *Manual* is much more accurately described by the word "physical" than "commercial." In fact, the reviewer was unable to see that the scientific study of the physical geography had been made anywhere to yield to requirements of commercial use. In other words, the geography taught by this method would furnish a basis for the understanding of commercial conditions as related to geography; but the commercial conditions seem not to be independently treated. It should be mentioned that, while the exercises include the world, special attention is given to the United States, all of whose geographic units are made the basis of special study.

In conclusion, the reviewer would say that all teachers of geography in normal schools and colleges should become acquainted with these manuals, as, whether they use them or not, they cannot fail to find many practical and stimulating suggestions.

CARL RUSSELL FISH

UNIVERSITY OF WISCONSIN

Medical Inspection of Schools. By LUTHER HALSEY GULICK and LEONARD P. AYRES. Pp. xx+224. $1.50.

Medical Inspection of Schools, by Gulick and Ayres, made its first appearance in October, 1908, and that it filled a demand is guaranteed by the necessity of reprinting it in January, 1909, and again in December of the same year. Such remarkable advances had been made in five years that the authors very wisely decided to write an almost entirely new book under the same title and covering the same ground, rather than issue a fourth reprint of the somewhat out-of-date material.

Progress in the field of medical inspection of schools in America is noted along three main lines: (1) the increased number of states that have made inspection mandatory or permissive; (2) the extension of the scope of the work, which was at first inaugurated for and confined to the inspection of contagious diseases, to include the examination and supervision of non-communicable physical defects and unhygienic school environment; (3) the growing conviction that inspection of the physical condition of pupils is in the largest sense an educational concern, that each child must be developed for his own sake, as well as protected from others, and that perforce for this reason every feature of the work, except that which is concerned with contagious diseases, should be controlled by boards of education.

The subject-matter is treated under the following chapter headings: "The Argument for Medical Inspection"; "History and Present Status"; "Inspection for the Detection of Contagious Diseases"; "Physical Examinations"; "The School Nurse"; "Making Medical Inspection Effective"; "Results"; "Per Capita Cost and Salaries"; "Dental Inspection"; "Con-

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trolling Authorities in American Municipalities"; "Physical Defects and School Progress"; "Legal Provisions."

In this new form one notes that special emphasis is given to the excellent work of dental inspection and that the topic of the relation of physical defects and school progress is more conservatively handled than in its original presentation. Excellent illustrations of examiners at work and selected specimens of good working blank forms for the records of examiners are printed and add much to the value of the book. In its present altogether presentable form this book represents a valuable summary of the status of medical inspection of schools at the present time, and an indispensable source of authority for guidance in the installation of the best schemes where hygienic supervision has not received sufficient attention, or for the reorganization and correction of unworkable and unsatisfactory programs for caring for diseased and physically defective children. It is a distinct contribution to this worthy propaganda.

D. P. MACMILLAN

DEPARTMENT OF CHILD-STUDY AND EDUCATIONAL RESEARCH
CHICAGO PUBLIC SCHOOLS

American Poems. Selected and edited by WALTER C. BRONSON. Chicago: The University of Chicago Press, 1912. Pp. v+669. $1.00 net. Postpaid, $1.15.

This volume is intended "for use in schools and colleges" and for individual readers who wish "to become acquainted at first hand with the whole field of American poetry." The selections extend from William Morrell's "New England" (1625) through the whole list of American poets, near poets, and verse-writers, down to Emily Dickinson's "Simplicity" (1892). In all, seventy writers are listed in the index, and, in addition, the volume contains the verses of a dozen anonymous poets. About 300 pieces fill the 356 pages; 40 pages are given to Barlow and Freneau, 260 to the group of great nineteenth-century poets, and 50 to Whitman and Lanier; somewhat less than 200 pages remain for the other 75 writers.

Thus do comparatively unknown poets rub shoulders with masters. Indeed, the editor frankly affirms that "the space allotted to individual authors is not determined wholly by poetical merit. . . . . Trumble, Barlow, and Freneau, for example, are each given more pages than Holmes, not because they are better poets, but because their works are less accessible."

Accessibility as an important principle of selection has given the volume both its weakness and its strength. An unavoidable shortcoming lies in the fact that at least fifty or sixty of the eighty-odd authors are comparatively mediocre. Their verses are perhaps good enough to serve as an appropriate setting for the few gems of American poetry. By the principle of contrast even a gold setting is dull when compared with the jewel; so "The Day of

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Doom" may be excused on the principle of contrast for appearing under the same covers with the masterpieces of Lowell and Longfellow.

To put such a volume, in which the excellent is mingled with the indifferent, in the hands of undiscriminating high-school pupils has many obvious dangers. Teachers of literature in secondary schools, except perhaps for the rare Senior classes making intensive study of American literature, will hardly adopt Professor Bronson's book as a text. As a reference book it ought to be upon the shelves of every secondary-school library. For the individual reader who wishes to have a taste of all our poets, the volume will prove invaluable. It to be hoped, however, that general readers will continue to read Longfellow and the rest, not from compilations, however excellent, but from complete editions of these poets.

That which constitutes the volume's shortcoming for general readers is its strength for college classes. It is well for the college student to get the flavor of an old musty poem out of a musty old book; but for this few college libraries are adequate. The editor of *American Poems* has presented many selections not otherwise accessible. Moreover, the chronological order of presenting the works of various authors renders the book serviceable for classes in the history of literature. Professor Bronson has wisely avoided the presentation of fragments; a large majority of the selections are complete poems. Finally he has enriched his work by 100 pages of valuable notes and an elaborate bibliography, both of which college teachers of American literature will find useful.

R. L. LYMAN

UNIVERSITY OF WISCONSIN

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BOOKS RECEIVED

EDUCATION

Hoole, Charles. A New Discovery of the Old Art of Teaching School. Syracuse, N.Y.: C. W. Barden, 1912. Pp. xxxvii+36. $3.00.

Hummel, William G. Materials and Methods in High School Agriculture. New York: Macmillan, 1913. Pp. xv+385. $1.25.

Meumann, E. Psychology of Learning. New York: D. Appleton & Co., 1913. Pp. xix+393.

HEALTH AND HYGIENE

Bryant, L. S. School Feeding. Lippincott. Pp. +345.

Burks, Francis W., and Jessie D. Health and the School. Appleton & Co., 1913. Pp. xviii+393.

Coleman, Walter M. The People's Health. New York: Macmillan, 1913. Pp. xv+307. $0.70.

MATHEMATICS

Anderegg, Frederick, and Roe, Edward Drake. Trigonometry. Boston: Ginn & Co. Pp. ix+108. $0.75.

Burket, Charles William, and Swartzel, Karl Dale. Farm Arithmetic. New York: Orange Judd Co., 1913. Pp. xvii+280.

Byrnes, James C., Richman, Julia, and Roberts, John S. Pupils' Arithmetic. New York: Macmillan, 1913. Pp. viii+432. $0.50.

Collins, Joseph V. Advanced Algebra. American Book Co., 1913. Pp. x+342.

Fite, William B. First Course in Algebra. D. C. Heath & Co., 1913. Pp. vii+285.

Ford, Walter Burton, and Ammerman, Charles. Plane Geometry. New York: Macmillan, 1913. Pp. ix+213+xxxi. $0.80.

Long, Edith, and Brenke, W. C. Algebra, First Course. New York: Century Co., 1913. Pp. vi+283. $1.10.

Van Tuyl, George H. Essentials of Business Arithmetic. American Book Co., 1913. Pp. 272+xvii. $0.70.

ENGLISH

Bleyer, Willard G. Newspaper Printing and Editing. Boston: Houghton Mifflin Co. Pp. ix+365. $1.65.

Halleck, Reuben P. English Literature. American Book Co., 1913. Pp. xi+647. $1.30.

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Macaulay's Speeches on Copyright and Lincoln's Address at Cooper Union. Edited by Edwin L. Miller. Cambridge, Mass.: Riverside Press, 1913. Pp. viii+118. $0.25.

Manly, John Mathews, and Powell, John Arthur. A Manual for Writers. Chicago: The University of Chicago Press, 1913. Pp. vii+225. $1.25.

News of the Press. Literary Selections from Newman. New York: Longmans, Green & Co. Pp. xv+210. $0.60.

MISCELLANEOUS

Baily, L. H. Botany for Secondary Schools. New York: Macmillan, 1913. Pp. xiv+465. $1.25.

Barass, John E. Writing Latin, Book Two. D. C. Heath & Co., 1913. Pp. viii+160. $0.75.

Bexel, J. A., and Nichols, F. G. Principles of Book Keeping and Farm Accounts. American Book Co., 1913. Pp. 180. $0.65.

Bice, Hiram H. Sight Reading. New York: Ginn & Co., 1913. Pp. xii+159. $0.50.

Buxton, George Fred, and Curran, Fred L. Paper and Cardboard Construction. Peoria, Ill.: Manual Arts Press, 1913. Pp. 191. $1.50.

Fletcher, Robert H. Shakespeare Glossary, Grammar, etc., 1913. Pp. 90. $0.30.

Fletcher, Robert H. Tennyson and Browning. 1913. Pp. 258. $1.00.

Harding, Samuel B. New Mediaeval and Modern History. American Book Co., 1913. Pp. xvi+752. $1.50.

Lockwood, Francis C. The Freshman and His College. D. C. Heath & Co., 1913. Pp. vi+156.

Mayne, D. D. Business Spelling Book. New York: Longmans, Green & Co., 1913. Pp. vii+120. $0.30.

Thomas, Allen C. History of England. D. C. Heath & Co., 1913. Pp. vii+651. $1.50.

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CURRENT EDUCATIONAL LITERATURE IN THE PERIODICALS[1]

IRENE WARREN
Librarian, School of Education, University of Chicago

Abbott, Helen L. The responsibility of the schoolroom. Educa. 34:27–30. (S. '13.)

Asterisk, John. The reorganization of the University of London. Educa. R. 46:109–34. (S. '13.)

Bell, Catherine F. Another experience with the Binet test. Train. School M. (N.J.) 10:77–78. (S. '13.)

Bennett, Charles A. Impression gained from a day's visit to the Mississippi Industrial Institute and College. Voca. Educa. 3:11–23. (S. '13.)

Bok, Edward. Is the college making good? Outl. 104:851–57. (16 Ag. '13.)

Brown, Marion Frances. The creed of an American schoolboy. Educa. 34:45. (S. '13.)

Cholmeley, R. F. Secondary education: the next step towards a national system. Educa. T. 66:375–78. (S. '13.)

Church, H. O. The use of scientific material in the high-school course in English. School R. 21:461–66. (S. '13.)

Claus, Henry T. The problem of college chapel. Educa. R. 46:177–87. (S. '13.)

Colby, Elbridge. Value of the college fraternity. Educa. R. 46:157–67. (S. '13.)

Cooley, Edwin G. Professor Dewey's criticism of the Chicago Commercial Club and its Vocational Education Bill. Voca. Educa. 3:24–29. (S. '13.)

Crawshaw, F. D. College entrance and advanced credits for manual arts. School R. 21:467–74. (S. '13.)

Dorey, J. Milnor. Public speaking and dramatics in high schools. Educa. 34:31–38. (S. '13.)

Education that educates. Outl. 104:845–46. (16 Ag. '13.)

Eikenberry, W. L. First-year science in Illinois high schools. School R. 21:542–48. (O. '13.)

Gathany, J. Madison. Teaching practical politics in our schools. Educa. 34:20–26. (S. '13.)

Goldfarb, A. J. The teaching of college biology. Science 38:430–36. (26 S. '13.)

Grupe, Mary A. A review of the pedagogical studies in the teaching of spelling. Educa. 34:1–19. (S. '13.)

Hargitt, Charles W. A problem in educational eugenics. Pop. Sci. Mo. 83:355–67. (O. '13.)

[1] *Abbreviations.*—Educa., Education; Educa. R., Educational Review; Educa. T., Educational Times; J. of Educa. Psychol., Journal of Educational Psychology; Lit. D., Literary Digest; Outl., Outlook; Pop. Sci. Mo., Popular Science Monthly; School R., School Review; Train. School M. (N.J.), Training School Magazine (New Jersey); Voca. Educa., Vocational Education.

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Hollingworth, H. L. Correlation of abilities as affected by practice. J. of Educa. Psychol. 4:405–14. (S. '13.)
Host, Arthur G. First-year work in modern languages. School R. 21:549–59. (O. '13.)
Irwin, Elizabeth A. A study of the feeble-minded in a west side school in New York City. Train. School M. (N.J.) 10:65–76. (S. '13.)
Is the college making good? Outl. 104:991–95. (30 Ag. '13.)
Jessup, Walter A. The shifting school population. School R. 21:513–22. (O. '13.)
Judson, Harry Pratt. Economy in education. School R. 21:441–45. (S. '13.)
Kenwood, Sydney H. The real problem in education. Educa. T. 66:379–80. (S. '13.)
Library theory and practice. Dial 55:131–33. (1 S. '13.)
Lyttleton, Edward. Instruction in matters of sex. Educa. R. 46:135–42. (S. '13.)
McVey, Frank L. The matter of college entrance requirements. Pop. Sci. Mo. 83:286–93. (S. '13.)
Manny, Frank A. Bibliography of sex hygiene. Educa. R. 46:168–76. (S. '13.)
Misused mathematics. Lit. D. 47:467. (20 S. '13.)
Moore, E. C. Indispensable requirements in city school administration. Educa. R. 46:143–56. (S. '13.)
(The) next college president; by a near professor. Pop. Sci. Mo. 83:265–85. (S. '13.)
Potter, George M. Relative efficiency of public and private secondary institutions. School R. 21:523–37. (O. '13.)
Reavis, W. C. An experiment in the teaching of high-school composition. School R. 21:538–41. (O. '13.)
Redfield, William C. A plea for practical education: excerpts from recent addresses. Voca. Educa. 3:1–10. (S. '13.)
Rust, Annie Coolidge. Economy in the kindergarten. Educa. 34:46–49. (S. '13.)
Sachs, Felix. Preliminary study of the relative efficiency of inductive and deductive teaching of logical reasoning. J. of Educa. Psychol. 4:381–92. (S. '13.)
Shideler, Samuel Ervin. Qualifications, salary, and tenure of the teachers in the commissioned high schools of Indiana. School R. 21:446–60. (S. '13.)
Short, R. L. The institutional high school and what it does for the community. School R. 21:475–77. (S. '13.)
Starch, Daniel. Correlations among abilities in school studies. J. of Educa. Psychol. 4:415–18. (S. '13.)
Stearns, Wallace N. What does it cost to build a college? Educa. 34:39–42. (S. '13.)
Stratton, George Frederic. The man behind the child. Outl. 105:137–40. (20 S. '13.)
Strong, Edward K., Jr. Psychological methods as applied to advertising. J. of Educa. Psychol. 4:393–404. (S. '13.)
Vocational Bible-schools. Lit. D. 47:475. (20 S. '13.)
Wallace, J. A. A plan for outside reading. School R. 21:478–85. (S. '13.)

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SOME VITAL STATISTICS OF CHILDREN OF SCHOOL AGE

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The present discussion is practically limited to observations on the mortality statistics of children of school age as returned by the Division of Vital Statistics of the Bureau of the Census for the calendar year 1911. The term "children of school age" is, of necessity, limited to ages five to nineteen, inclusive, since the census returns do not give the data by causes and single years of life, but only by the two divisional periods, five to nine and ten to nineteen years. The mortality returns also cannot, at the present time, be scientifically correlated to the population of corresponding ages, since the required information for the registration area has not as yet been made public by the Census Office. For the present purpose, however, this limitation is not of material importance. The following table will emphasize the practical importance of the present discussion, which affects the health and longevity of nearly thirty million children and young persons of school age.

According to this table the population of the United States, ages five to nineteen, in the year 1910 was 27,931,375. Making allowance for the increase in population during the intervening period, the number of children and young persons of school age within the previous definition of the term may be conservatively estimated at 30,000,000 for the middle of the year 1913.

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Of the population of school age a considerable proportion of both children and young persons are not at school, and a fair proportion are still within the illiterate class, which, however, is gradually diminishing throughout the United States. The percentage of children not at school of the age period five to six is quite large, and an equally large proportion of young persons of ages fifteen to nineteen are not at school for economic, physical,

TABLE I

POPULATION OF THE UNITED STATES, AGES FIVE TO NINETEEN YEARS, CENSUS OF 1910

Ages	Males	Females	Total
5–9	4,924,123	4,836,509	9,760,632
10–14	4,601,753	4,505,387	9,107,140
15–19	4,527,282	4,536,321	9,063,603
5–19	14,053,158	13,878,217	27,931,375

or other reasons. The census of 1910 fortunately gives the returns of the persons actually enrolled in the schools of the United States during the year 1909–10, being apparently an adaptation of the statistics annually collected by the Bureau of Education. According to these returns the number of children and young persons at school during the year 1909–10 was 18,009,891. Making allowance for the increase in the population of school age during the intervening period, it is safe to assume that for the year 1913 the school enrolment was about 20,000,000. The explanatory note in the census report with reference to the foregoing statement reads as follows:

> It is not to be understood that all of these persons were in school on April 15, or that they were simultaneously attending school at any time during the period. They represent the whole number who had any relation as pupils to the schools of the country during this time, and may, for brevity, be designated as persons attending school in 1909–10. Though the period falls from two to two and a half months short of the entire school year 1909–10, the number of persons who enter school in April, May, and June of any school year who have not been at school earlier in the year is an insignificant part of the whole enrolment. Hence the period covered by the census enumeration can be regarded as practically identical with the school year.

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In more detail, the school enrolment, with reference to the corresponding population of school age, is set forth in the following table, also derived from the final census report for 1910:

TABLE II

POPULATION OF SCHOOL AGE AND SCHOOL ENROLMENT, 1909–10

AGE PERIOD	POPULATION, 1910	PERSONS ATTENDING SCHOOL, 1909–10	
		Number	Percentage
Total	91,972,266	18,009,891	19.6
Under 6 years	12,666,762	396,431	3.1
6 to 20 years	27,750,599	17,300,204	62.3
6 to 9 years	7,725,234	5,678,320	73.5
10 to 14 years	9,107,140	8,028,662	88.2
15 to 20 years	10,918,225	3,593,222	32.9
15 to 17 years	5,372,176	2,748,386	51.2
18 to 20 years	5,546,049	844,836	15.2
21 years and over	51,554,905	313,256	0.6

In Table II the facts are unfortunately not given by single years of life, which would be desirable for the purpose of showing precisely the number of persons at school or enrolled for school purposes during each year of the educational period, five to nineteen years, inclusive. The table, however, is fully sufficient for the present purpose to emphasize the fact that out of approximately 30,000,000 persons of school age, five to nineteen years, inclusive, 62 per cent, or from about 18,000,000 to 20,000,000, are actually at school and, therefore, subject to the physical, mental, and moral strain of school life.

The mortality returns of the United States are limited to the so-called registration area, which includes the states and cities for which the death certificates are accepted by the Division of Vital Statistics of the Census Office. The population of this area in 1911 was 59,275,000, equivalent to 63.1 per cent of the total population of the continental United States. The actual area of the so-called registration states for 1911 represented, however, only 37.2 per cent of the total land area of the United States, so that for a considerable section, chiefly rural, of course, we at

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present have no trustworthy and absolutely conclusive information regarding the local death-rate from all causes and from particular causes in detail. It is, therefore, undoubtedly somewhat hazardous in statistical practice to accept the returns for the registration area as conclusive for the country at large but for the time being there is no alternative. It is safe, however, to assume that in any event the conclusions are not likely to be seriously in error with respect to the principal causes of death, and that the margin of doubt affects chiefly the less important causes, or such, for illustration, as are limited to less than 1,000 deaths per annum in the registration area. It has seemed advisable, however, for the present purpose, to estimate the probable mortality for the country at large, and, subject to the foregoing words of caution, the conclusions may be accepted with confidence as being approximately correct.

The total number of deaths in the registration area during the year 1911 was 839,284. For ages five to nineteen, inclusive, this mortality was distributed as follows:

TABLE III

MORTALITY, AGES FIVE TO NINETEEN

(U.S. Registration Area, 1911)

Ages	Reg. Area No. Deaths	Percentage	Estimate for the Continental United States
5– 9	18,112	35.1	28,749
10–14	12,337	23.9	19,583
15–19	21,154	41.0	33,577
	51,603	100.0	81,909
5–19	51,603	6.1	81,909
All other ages	787,681	93.9	1,250,288
All ages	839,284	100.0	1,332,197

It is shown by Table III that during the year 1911 there were in the registration area 51,603 deaths at ages five to nineteen, of which 35.1 per cent occurred at ages five to nine, 23.9 per cent at ages ten to fourteen, and 41.0 per cent at ages fifteen to nineteen. Of the mortality at all ages 6.1 per cent occurred at the age period

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five to nineteen years, inclusive. When these statistics are applied to the total population of the United States as estimated by the Census Office for the year 1911 at 93,927,000, it is shown that the probable total number of deaths, ages five to nineteen, in the entire continental United States during that year was 81,909, of which 28,749 were deaths at ages five to nine, 19,583 at ages ten to fourteen, and 33,577 at ages fifteen to nineteen.

Before proceeding to a discussion in detail of the causes of death at ages five to nineteen, and their relation to modern methods of prevention and sanitary control, the following table of comparative death-rates is included for the purpose of convenient reference and comparison:

TABLE IV

COMPARATIVE MORTALITY RATES, BY DIVISIONAL PERIODS OF LIFE
(United States Registration Area, 1900–1911)
Rate per 1,000 of Population

	Males		Females	
	1900	1911	1900	1911
Under 1 year	178.4	138.6	145.0	112.1
1 to 4 years	20.4	13.3	19.1	12.2
Under 5 years	54.1	39.8	45.7	33.3
5 to 9 years	4.7	3.4	4.6	3.1
10 to 14 years	2.9	2.4	3.1	2.1
15 to 19 years	4.9	3.7	4.8	3.3
20 to 24 years	7.0	5.3	6.7	4.7
25 to 34 years	8.3	6.7	8.2	6.0
35 to 44 years	10.8	10.4	9.8	8.3
45 to 54 years	15.8	16.1	14.2	12.9
55 to 64 years	28.8	30.9	25.8	26.0
65 to 74 years	59.5	61.6	53.7	55.1
75 years and over	145.9	147.4	139.3	139.2

Limiting the analysis of this table to the three divisional periods of life within the scope of the present discussion, it appears that at ages five to nine the male death-rate has decreased during the intervening decennium from 4.7 per 1,000 of population to 3.4. The death-rate at ages ten to fourteen years decreased from 2.9 to 2.4; but at ages fifteen to nineteen there was a decline from 4.9 to 3.7. The corresponding decreases in the female death-rate were as follows: at ages five to nine the death-rate declined from

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4.6 to 3.1 per 1,000; at ages ten to fourteen, from 3.1 to 2.1; and at ages fifteen to nineteen, from 4.8 to 3.3. In other words, the death-rates of 1911 as compared with 1900 were, for males, 72 per cent at ages five to nine, 83 per cent at ages ten to fourteen, and 76 per cent at ages fifteen to nineteen; and for females, 67 per cent at ages five to nine, 68 per cent at ages ten to fourteen, and 69 per cent at ages fifteen to nineteen. It is therefore shown that there was a larger relative decline in the mortality of females than of males, and that the least decline occurred for males at ages ten to fourteen, when, however, the actually attained death-rates are relatively very low. The table is of interest in further emphasizing the well-known fact that commendable progress has been made in the public health of the United States during the past decade, and that this improvement has been of no inconsiderable advantage to the population of school age, or from five to nineteen years, inclusive.

It would obviously be impossible in a discussion of this kind to include all of the numerous causes of death which affect the population at ages five to nineteen. I have therefore limited the discussion to thirty-seven principal causes, represented by at least 250 deaths in the registration area during the year 1911. These thirty-seven causes are represented by 46,524 deaths out of a total of 51,603 deaths from all causes. At ages five to nine the thirty-seven causes are represented by 16,236 deaths, or 89.6 per cent of the 18,112 deaths from all causes at this period of life. At ages ten to nineteen the thirty-seven causes are represented by 30,288 deaths, or 90.4 per cent of the 33,491 deaths from all causes at this period of life. The details are presented in tabular form in Appendix A.

I am not aware of any similar analysis having heretofore been made of the mortality of the age period five to nineteen years by the principal causes of death. Some of the results set forth are certainly suggestive of a very considerable possibility of a further and material reduction in the mortality of child life and the early period of adolescence. According to the table the leading cause of death at ages five to nineteen was tuberculosis of the lungs, represented by 7,394 deaths, or 14.3 per cent of the mortality from

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all causes at this period of life; the next most important cause of death was accidents, represented by 7,142 deaths, or 13.8 per cent of the mortality from all causes at ages five to nineteen; the third leading cause was diphtheria and croup, represented by 3,661 deaths; followed by typhoid fever, with 3,298 deaths; organic diseases of the heart, with 3,021 deaths; and appendicitis and typhlitis, with 2,119 deaths. In other words, the causes of death during the period of school life are, in the order of their importance, according to American experience: (1) tuberculosis of the lungs, (2) accidents, (3) diphtheria and croup, (4) typhoid fever, and (5) organic diseases of the heart. These five causes account for 24,516 deaths out of a total of 51,603 deaths from all causes at ages five to nineteen, or 47.5 per cent. With the exception of organic diseases of the heart, of which, however, also a fair proportion are within the preventable class, the other four causes are largely preventable and within the scope of federal and state control in matters of public health. The larger significance of these conclusions, however, is brought out by the table in Appendix B, in which the mortality by thirty-seven specified causes has been estimated for the entire continental United States separately for each of the two periods, five to nine years and ten to nineteen years, and in the aggregate for the period five to nineteen years considered as a group. On the basis of this estimate it appears that during 1911 there were approximately 81,909 deaths from all causes among persons of school age, and of this number 73,843, or 90.2 per cent, were deaths attributable to the thirty-seven specified causes. The table would seem to warrant the conclusion that at the present time there are annually in the United States, among children and young persons of school age, with estimates brought down to 1913, 12,229 deaths from tuberculosis of the lungs, 11,812 from accidents, 6,056 from diphtheria and croup, 5,455 from typhoid fever, 4,996 from organic diseases of the heart, 3,504 from appendicitis and typhlitis, 3,481 from scarlet fever, 2,648 deaths from lobar pneumonia, and 2,301 from ill-defined forms of pneumonia. These are the principal causes of death and with few exceptions they all fall strictly within the field of preventive medicine and scientific methods of public hygiene.

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The table presents some very interesting medical and moral problems in the minor causes of death, which, however, require on this occasion no extended discussion. The mortality from malaria is unquestionably underestimated in that the non-registration area of the United States includes the entire rural South, where malaria continues to be more or less common, especially, of course, in the low-lying and ill-drained lands of the coastal plain and the delta region. The mortality from tetanus, represented by 575 deaths in 1911, is also probably an underestimate, but no thorough inquiry has been made into the geographical distribution of what is, without question, a strictly preventable disease. The mortality from cancer (including Sarcoma), represented by 462 deaths at ages five to nineteen, is of special interest to students of the subject of malignant diseases, since, as a general principle of medicine, it is often assumed that cancer is of comparatively rare occurrence during the early years of life. As shown by the table, there were approximately 127 deaths from cancer at ages five to nine, and 335 at ages ten to nineteen. The mortality from acute articular rheumatism is relatively high and represented by 1,660 deaths at ages five to nineteen, and the same conclusion applies to diabetes, represented by 980 deaths. Both of these causes are probably closely related to erroneous methods of nutrition, and possibly the same conclusion applies to acute nephritis and Bright's disease, represented respectively by 910 and 1,501 deaths during the year 1911.

Acute anterior poliomyelitis is represented by 397 deaths in 1911, but the variable incidence of this disease does not warrant definite conclusions on the basis of a single year, since its epidemic occurrence might easily double or treble the annual mortality. Epilepsy is represented by 636 deaths. The probable close relation of many cases of epilepsy to uncorrected eye-strain suggests far-reaching possibilities of preventing what must be considered one of the most lamentable causes of death in childhood and early adolescence. The large loss of life from appendicitis, represented by 3,363 deaths, suggests the obvious neglect of early operative treatment, which, according to absolutely trustworthy statistics, is entirely successful in the overwhelming majority of cases. The

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mortality from simple peritonitis, represented by 574 deaths; puerperal sepsis, represented by 638 deaths; and puerperal albuminuria, with 417 deaths, all suggest shortcomings in medical practice or neglect or delay in medical attendance, since in a large majority of cases these diseases also fall strictly within the preventable class. Deplorable aspects of early adolescence are revealed by 632 deaths from suicide at ages ten to nineteen, although there would seem to be no very conclusive evidence that child suicides are materially on the increase, as is apparently the case in certain European countries. There can be no question of doubt, however, that many suicides could be prevented by more skilful attention to obvious evidences of abnormal or disturbed mentality, the symptoms of which have been so admirably described in the monumental work on *Adolescence*, by G. Stanley Hall. The fact that during 1911 there should have been 560 homicidal deaths of children and young persons reflects the low moral standard of the entire United States in the increasing disregard for the sanctity of human life. As brought out by my analysis of the homicide record of American cities, the rate has rapidly increased from an average of 4.9 per 100,000 of population during the decade ending with 1892, to 7.5 for the decade ending with 1912.[1]

Numerically, however, of most importance are the three causes first referred to, that is, tuberculosis of the lungs, accidents, and diphtheria and croup. The problem of tuberculosis has fortunately been made a matter of nation-wide concern during recent years, although as yet insufficient attention has been given to the occurrence of tuberculosis in infancy and early childhood. The fact is frequently overlooked that the proportionate mortality from tuberculosis of the lungs is highest at ages twenty-five to thirty-four, and there are the most convincing reasons for accepting the view that the disease is contracted, as a rule, during early infancy or early adolescence. The urgency of more scientific research into the causes of tuberculosis in infancy and childhood, and the best possible methods of prevention, might properly be suggested to the National Association for the Study and Prevention of

[1] See my discussion of the Homicide Record for 1912 in The Spectator, a New York insurance periodical, for Nov. 6, 1913.

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Tuberculosis, which has rendered such conspicuous service in bringing about a general reduction in the death-rate from this widespread and deplorable disease. The problem, however, of providing more adequately and more in conformity to medical requirements, for the needs of tuberculous school children, is strictly the concern of educational authorities, and reference may appropriately be made here to the admirable discussions of the subject in the annual reports of the Medical Officer (Education) of the London County Council, and the Chief Medical Officer of the Board of Education of England and Wales.

It would serve no practical purpose to discuss the prevention of diphtheria and croup and other acute infectious diseases of childhood and early adolescence, since more or less adequate public attention is being given to these subjects by the public health authorities throughout the country, but it may properly be emphasized, in conclusion, that the most neglected field of child life in its relation to preventable mortality is the lamentable annual loss of young lives by accidents, which in the overwhelming majority of cases are unquestionably the result of gross indifference and neglect on the part of either the parents, the public authorities, or of foolish daring and exploits on the part of the children, which could be prevented in at least a number of cases by proper attention to the educational aspects of accident prevention. It is much to the credit of the American Museum of Safety that they have originated a nation-wide campaign in the safety instruction of school children, and too much cannot be said in praise of the hearty co-operation of the educational authorities of the state and city of New York. As far as I know, the safety education of school children has for the first time been made compulsory in the state of New Jersey by a very recent act of the legislature, so that for the present the actual results of such education cannot be reported upon. It requires, however, no very extended knowledge of the deplorable details of accidents to child life to bring out the almost infinite possibilities of life-saving in a direction which, as previously stated, is probably the most neglected phase of the modern problem of the conservation of human life and health.

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The mortality of children and young persons of school age involves many other than medical considerations. There is a serious economic loss involved in the needless waste of children's lives, readily shown by a brief consideration of the normal cost of education and the resulting waste to the community in the case of children educated at public expense for a number of years but curtailed in their normal expectation of life by preventable deaths in early childhood or early adolescence. The average cost of public-school education, ages five to nineteen years, is approximately estimated by the Bureau of Education at $35 per annum. On the assumption that there are 85,000 deaths per annum at ages five to nineteen in the United States at the present time, and that the average duration of education previous to death is five years, the net estimated loss per pupil would be $175, and $14,875,000 for the entire mortality. This loss is absolute in every sense of the word, and may be restated in the words that annually some eighty-five thousand children die in this country at a period of life when they have received, more or less at public expense, a considerable amount of costly education, without any actual or prospective financial returns to the community. The education authorities are, therefore, equally interested with those responsible for the public health in the more effective conservation of child life as an economic problem, while to parents and the community at large the preventable mortality of children is primarily a question of improved methods of the medical supervision of school children, of the more effective control of acute infectious diseases, of the elimination of needless accidents, and higher standards of personal hygiene in childhood and early adolescence.[1]

[1] For a more extended discussion, see my address on "Medical and Social Aspects of Child Labor," *Proceedings National Conference of Charities and Correction*, 1903, and "Medical and Physical Examination of School Children," *Quarterly Publication American Statistical Association*, June, 1911.

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APPENDIX A

Mortality at School Ages

(United States Registration Area, 1911)

Diseases	Ages 5–9	Per-centage	Ages 10–19	Per-centage	Ages 5–19	Per-centage
Typhoid fever	747	4.1	2,551	7.6	3,298	6.4
Malaria	104	0.6	166	0.5	270	0.5
Measles	501	2.8	303	0.9	804	1.6
Scarlet fever	1,485	8.2	620	1.8	2,105	4.1
Whooping cough	243	1.3	32	0.1	275	0.5
Diphtheria and croup	2,778	15.3	883	2.6	3,661	7.1
Influenza	99	0.6	232	0.7	331	0.6
Tetanus	151	0.8	211	0.6	362	0.7
Tuberculosis of lungs	579	3.2	6,815	20.3	7,394	14.3
Acute miliary tuberculosis	106	0.6	544	1.6	650	1.3
Tubercular meningitis	606	3.3	490	1.5	1,096	2.1
Abdominal tuberculosis	142	0.8	374	1.1	516	1.0
Other forms of tuberculosis	180	1.0	456	1.4	636	1.2
Cancer (all forms)	80	0.4	211	0.6	291	0.6
Acute articular rheumatism	419	2.3	627	1.9	1,046	2.0
Diabetes	153	0.8	464	1.4	617	1.2
Simple meningitis	368	2.0	302	0.9	670	1.3
Cerebrospinal meningitis	240	1.3	217	0.6	457	0.9
Acute anterior poliomyelitis	148	0.8	102	0.3	250	0.5
Epilepsy	82	0.5	319	1.0	401	0.8
Acute endocarditis	214	1.2	413	1.2	627	1.2
Organic diseases of the heart	830	4.6	2,191	6.5	3,021	5.9
Broncho-pneumonia	622	3.4	336	1.0	958	1.9
Lobar-pneumonia	530	2.9	1,071	3.2	1,601	3.1
Pneumonia (undefined)	553	3.1	838	2.5	1,391	2.7
Diarrhoea and enteritis	413	2.3	179	0.5	592	1.1
Appendicitis and typhlitis	588	3.2	1,531	4.6	2,119	4.1
Intestinal obstruction	142	0.8	186	0.6	328	0.6
Simple peritonitis	108	0.6	254	0.8	362	0.7
Acute nephritis	253	1.4	320	1.0	573	1.1
Bright's disease	239	1.3	707	2.1	946	1.8
Puerperal sepsis	.....	....	402	1.2	402	0.8
Puerperal albuminuria	.....	....	263	0.8	263	0.5
Disease of bones	118	0.7	200	0.6	318	0.6
Suicides	.....	....	398	1.2	398	0.8
Accidents	2,384	13.2	4,758	14.2	7,142	13.8
Homicides	31	0.2	322	1.0	353	0.7
Total 37 specified causes	16,236	89.6	30,288	90.4	46,524	90.2
All other causes	1,876	10.4	3,203	9.6	5,079	9.8
Total deaths at school ages	18,112	100.0	33,491	100.0	51,603	100.0

Total deaths at all ages, United States registration area—839,284.

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APPENDIX B

Estimated Mortality at School Ages

(Continental United States, 1911)

Diseases	Ages 5–9	Ages 10–19	Ages 5–19
Typhoid fever	1,186	4,049	5,235
Malaria	165	263	428
Measles	795	481	1,276
Scarlet fever	2,357	984	3,341
Whooping cough	386	51	437
Diphtheria and croup	4,410	1,402	5,812
Influenza	157	368	525
Tetanus	240	335	575
Tuberculosis of lungs	919	10,817	11,736
Acute miliary tuberculosis	168	863	1,031
Tubercular meningitis	962	778	1,740
Abdominal tuberculosis	225	594	819
Other forms of tuberculosis	286	724	1,010
Cancer (all forms)	127	335	462
Acute articular rheumatism	665	995	1,660
Diabetes	243	737	980
Simple meningitis	584	479	1,063
Cerebrospinal meningitis	381	344	725
Acute anterior poliomyelitis	235	162	397
Epilepsy	130	506	636
Acute endocarditis	340	656	996
Organic diseases of the heart	1,317	3,478	4,795
Broncho-pneumonia	987	533	1,520
Lobar-pneumonia	841	1,700	2,541
Pneumonia (undefined)	878	1,330	2,208
Diarrhoea and enteritis	656	284	940
Appendicitis and typhlitis	933	2,430	3,363
Intestinal obstruction	225	295	520
Simple peritonitis	171	403	574
Acute nephritis	402	508	910
Bright's disease	379	1,122	1,501
Puerperal sepsis	.....	638	638
Puerperal albuminuria	.....	417	417
Disease of bones	187	317	504
Suicides	.....	632	632
Accidents	3,784	7,552	17,336
Homicides	49	511	560
Total 37 specified causes	25,770	48,073	73,843
All other causes	2,979	5,087	8,066
Total deaths at school ages	28,749	53,160	81,909

Total deaths at all ages, continental United States—1,332,197.

Note.—The above figures should be increased by approximately 4.2 per cent to obtain the estimates for 1913.

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AN EXPERIMENT IN THE SUPERVISED STUDY OF MATHEMATICS

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The method of giving a double period, part to recitation and part to preparation of the lesson under the supervision of the instructor, has been used in comparatively few schools and in comparatively few subjects. In a few cases mathematics has been taught in this manner. This method gives an opportunity for taking care of the various abilities in the class and it is the opinion of most of those who have used the method that the results warrant its continuation. An objection on the part of school authorities arises from the supposed increased expense. In view of these facts it seemed useful to compare experimentally the efficiency of the supervised study of mathematics with that of the usual method and if possible to form some idea of their relative costs.

The experiment herein described was conducted with classes in beginning plane geometry. From a group of sixty students who were to begin this subject two classes were selected in the following manner. The names of the sixty students were written on cards which were then shuffled. From these cards thirty-six were drawn at random. These students had completed three semesters of algebra, and with the averages of their algebra grades as a basis the thirty-six students were divided into two groups of eighteen each and of abilities as nearly equal as possible.

The following table, in which *S* refers to the supervised class, *U* to the unsupervised class, gives a comparison of the algebra averages of the two classes:

Average of		Mean Deviation from Own Average		Amount of Variation in		Number above Total Average		Number below Total Average	
S	U	S	U	S	U	S	U	S	U
86.68	87.2	4.61	5.35	28	21	9	10	9	8

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In four of the five points of comparison the unsupervised class has a slight advantage, while in the mean deviation the supervised class has the advantage. From this it would seem that the two classes were practically of the same ability, there being perhaps a slight advantage in favor of the unsupervised class.

The unsupervised class recited the first period in the day and then made their preparation in the study-room or at home. The supervised class recited the second period in the same manner as the other class did but remained the third period to make its preparation for the following day. During this period the students gave all of their time to the study of geometry with the understanding that they were not required to give any outside time to the subject. Each student of the supervised class kept a notebook at the instructor's desk. After the student had prepared his advanced lesson to his own satisfaction he was given additional work for his notebook, thus making it possible to keep every student busy during the entire hour. The students were free to call for help any time during the preparation period but all such help was given in the form of suggestions and questions. An effort was made to teach the child how to study geometry. Both classes were given the privilege of coming to the instructor for help during his consultation period, this help being given in the manner stated above.

A record of both the amount and the quality of the recitation work was kept. The amount of work was indicated by the number of times students made definite recitations, such as demonstrations and constructions. The quality of the work was indicated by a recitation grade given at the time the recitation was made. A comparison of these records for the two classes is shown in the graphs below. In each curve the horizontal units represent weeks. The vertical units of the first curve represent weekly averages, while those of the second curve represent the total number of recitations per week. The continuous curves represent the work of the unsupervised class and the dotted curves represent that of the supervised class. An examination of these curves shows that the supervised class had the higher average for ten of the fifteen weeks. The unsupervised class ranked higher for two weeks and the

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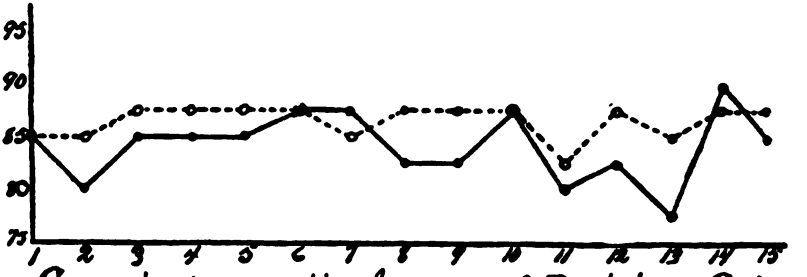
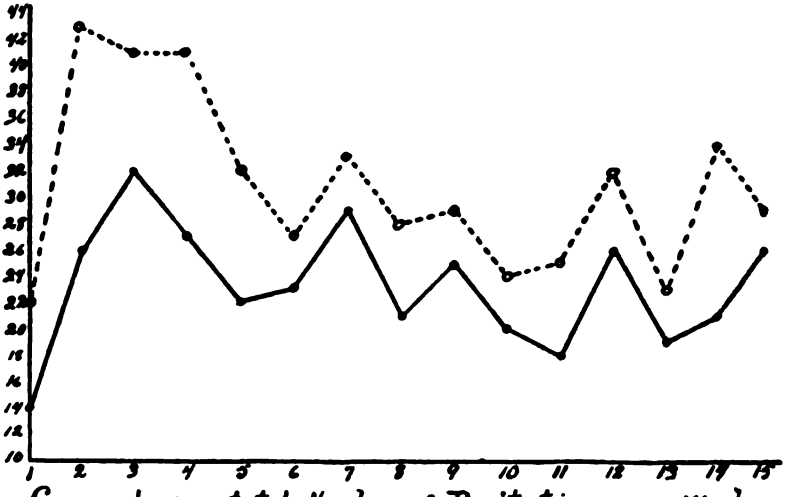
averages were the same for the other three weeks. The second set of curves shows that the supervised class made the larger number of recitations every week throughout the semester.

In accordance with the school organization, at the close of the first and second six weeks examinations covering the work of those



Curve showing weekly Averages of Recitation Grades



Curve showing total Number of Recitations per Week.

periods were given. At the close of the semester a final examination covering the entire work of the semester was given. These examinations consisted of propositions and exercises previously discussed in class. At various times there were given tests consisting of exercises which had never been taken up in class. The

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final examination covered a two-hour period; all the other tests covered forty-minute periods. The same questions were used for both classes in each test. In each examination more problems were given than any student could hope to solve and the students were told to answer as many as possible. With the exception of the final examination the papers were graded on a basis of the quality of work and the quantity of work did not enter into the grade. However, the number of problems solved was kept as a part of the student's record. In the case of the final examination the grade depended upon both the quality and the quantity of work. All papers were graded by the instructor but in such a manner that he did not know whose paper he was grading nor to which class it belonged until they were all graded.

The results of the examination are given in the following table:

Kind of Examination	No. of Exam.	Average of Class		Average Number Solved	
		Supervised	Unsupervised	Supervised	Unsupervised
Six-weeks Examinations	1	77.3	68.7	4.2	3.55
	2	81.2	80.4	4.3	3.9
Final Examination	1	92.4	80.1	12.7	12.2
Tests consisting of New Materials	1	82.4	73.9	4.8	4.4
	2	87.3	70.2	4.8	3.7
	3	77.6	56.2	2.1	2.1
	4	82.8	77.3	4.2	3.8

In each of the six-weeks examinations and the final examination the supervised class excelled in both the average grade and the average number of problems solved. As these examinations covered only the work discussed in recitation, the results indicate that this class had mastered the text better than the unsupervised class. In each of the remaining four tests the average grade of the supervised class was decidedly better than that of the unsupervised class and in only one case did the average number of problems solved by the unsupervised class equal that of the supervised class. As stated above, these tests consisted of problems which were new to both classes and the results therefore indicate that the supervised class was the more able to attack new problems, thus contradicting the arguments of those who believe that supervised study makes the student dependent upon the instructor.

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As stated above, the members of the supervised class kept notebooks in which they wrote up exercises after they had completed their daily preparation. The weaker students did but little of this work but some of the stronger students had as many as fifty exercises in their notebooks. The average number for the class was eighteen. This not only resulted in an increase in the amount of work done by the class but afforded an excellent opportunity for adjusting the work to the various abilities of the class.

At the close of the semester all students of the supervised class had passing grades while two of the other class failed. This was true although one student[1] of the supervised class had been absent on account of sickness for three weeks, and the lowest algebra grade of this class was decidedly lower than the corresponding grade of the unsupervised class. The difference in these results is accounted for by the fact that the instructor had a better opportunity to give individual instruction to the weaker members of the supervised class.

At the beginning of the semester some of the students were opposed to supervised study and asked to be transferred to other classes. Soon this opposition died out and there came requests from members of other classes to be transferred into the supervised class. The final attitude of the members of both classes toward the work was indicated by their written answers to the following question which was asked at the close of the semester: "If a supervised class in second-semester plane geometry should be conducted next semester would you care to be in it?" Every student answered this question in the affirmative.

The students of each class were also asked to state approximately the amount of time outside of class spent in preparation. The average time thus spent by the supervised class was eight minutes, making a total of about forty-five minutes spent in their daily preparation, while the unsupervised class spent about forty-two minutes. The time spent by the two classes was practically the same but the supervised class had the advantage of continuous, intensive study in the presence of the instructor, who was ready to make suggestions whenever a student found himself in difficulty.

[1] This student missed the last three weeks of school, but returned for the final examination. He made a passing grade in the work he had studied but was conditioned to make up the three weeks' work during the summer.

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The school officials object to the supervised study because of the additional expense. From the work of these two classes it is not possible to make an exact comparison of the costs of the two plans but some idea may be formed. During the semester the unsupervised class made 352 recitations, such as demonstrations of propositions, constructions, etc. The supervised class made 466 such recitations. This would enable the instructor to handle twenty-four students in the supervised class and keep as closely in touch with the individual as he does when he has eighteen in an unsupervised class. Most teachers with whom I have talked have expressed a willingness to handle four classes with supervised study rather than five with the other plan. This would allow the instructor to care for ninety-six students under the supervised plan against ninety under the ordinary method. It is argued that the difficulty in handling a class increases more rapidly than the number of students in the class. We admit the truth of this statement, but there are other factors in favor of supervised study which have not been considered in making this comparison. We have not taken into account the teacher's contact with the student during the study period which in itself is a strong factor in balancing the increased difficulty due to the larger number in the class. The decreased number of failures lessens the number of students repeating the subject and hence lessens the number of students to be handled as well as the deadening effect that such students have on the other members of the class. Consultation periods were kept by the instructor during which members of both classes were free to come for help. It naturally occurred that a large majority of these calls came from members of the unsupervised class. Such periods, so necessary under the ordinary method, would be needless if the supervised method were used.

The foregoing results seem to warrant the statement that supervised study of mathematics would not increase the expense of instruction as much as some have supposed and that the students under such instruction not only master the text more thoroughly but are more able to take the initiative in new work than are the students under the unsupervised plan.

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RELIABILITY OF GRADING WORK IN HISTORY

DANIEL STARCH AND EDWARD C. ELLIOTT
University of Wisconsin

This is the third of a series of studies on the variability of values placed by teachers upon examination papers. The first two dealt with English and mathematics respectively.[1] The present investigation, dealing with work in history, was conducted in exactly the same manner as the two preceding ones. An answer paper written as a final examination in United States history in a large high school in Wisconsin was manifolded by plates so as to reproduce the original precisely as presented by the pupil.

QUESTIONS

Write on any five of the seven questions.

1. Contrast the motives and methods of settlement of the French and English colonists in America.

2. (*a*) Point out all the possible points of difference between what the English and American idea of representative government was about 1775. (*b*) Give two concrete illustrations of how the above difference caused open friction.

3. (*a*) Explain clearly what the British plan of attack for 1777 was. (May be outlined.) (*b*) Point out why the date, October 17, 1777, was such an important date in American history.

4. Describe the "Period of Confederation." (*a*) Name of instrument of government used. (*b*) Defects in plan as proved by experience.

5. (*a*) Trace the steps leading up to the Federal Convention. (*b*) What objections were given to the ratification of the constitution? (*c*) Why is the constitution considered such a "wonderful instrument of government"?

6. (*a*) Contrast the personal characteristics and political policies of Hamilton and Jefferson. (*b*) What was Washington's policy relative to foreign alliances and how has it been observed since that time?

7. Describe industrial conditions in the United States in 1800 as to: (*a*) various industries engaged in; (*b*) their relative importance and why. (*c*) Define the various kinds of tariff. (*d*) Why did the South object to the protective tariff?

[1] D. Starch and E. C. Elliott, *School Review*, XX, 442–57; XXI, 254–59.

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History

I The English settlers that came to America, came generally for wealth, or on account of religious persecutions. The first English settlers were in search of wealth which they failed to find along the American coasts. The French came for adventure and with some attempt of settlement. They gain the friendliness of the Indians from the start but some of the English tried to drive the native inhabitants before them as they intered the new land and traveled westward. The French engaged almost from the start in fur trading and in effecting expeditions thru Canada. The English were the downfallen nobles who came to this country in hopes of regaining their wealth. They knew nothing about agriculture and therefore starved to death or returned to England. The French landed in the warmer months prepared for exploration and adventure which result in better settlements at first. The English later on adopted conditions favorable to American settlement.

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ANSWERS[1]

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2. The English thought the king was the representative of the people and who was to have all power. The American idea was of a representative government was a government with someone at the head with the power in the hands of the people or some representatives representing the people. That is, the passage of the stamp act by England, which was a tax upon the American people without representation. The English government simply passed the act and put it into effect without asking the American people whether or not they thought it just. Another instance was the tax levied upon tea imported into American colonies.

3. The British plan of attack for 1777 was to separate the New England states from the other states by gaining control of the Hudson River and the Lake Champlain region. This was to be done by sending Howe to Philadelphia who was to receive reinforcement from Clinton left at New York. Burgoyne was to come down thru the Lake Champlain region and receive help from Carlton of Canada and from St. Leger by way of the Mohawk River. The expedition failed because of the few men left with Clinton, the jealousy of Carlton and the defeat of St. Leger. (*b*) The date Oct. 17, 1777 is important in Am. history because it is the date beginning the independence of the United States and also setting forth capability of the United States in defending herself against other nations.

6. (*a*) Jefferson was a man who did not look at the showy side of life the way Hamilton did. His dress compared with that of Hamilton was poor, taking under consideration the offices held by Jefferson. Jefferson rode horseback to congress and tied his own horse while Hamilton thought he should of put on more style. Jefferson's idea was peace with all nations. He also sympathized with the French which were revolting at this time. Hamilton although a good man in politics seemed to adopt unjust methods in bringing forth his ways. Hamilton was a Federalist and Jefferson a republican. During one election Hamilton was among the men of the Federalist party who

[1] The errors are reproduced as in the original.

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planned that in throwing away their votes would bring their party representatives into offices. Their plan were defeated by themselves throwing too many votes away.

b) Washingtons policy was peace with all nations, and an independent nation on equal terms with all nations. This policy has be followed out by presidents following him.

7. The industries engaged in, in the U. S. in 1800 are agriculture, commerce, and fishing. Commerce was about this time beginning to take an important stand in industrial conditions in U. S. Agriculture was important because it had been the only occupation of the American people and cotton was their chief export. Fishing was of somewhat importance but not so much as agriculture and commerce.

(*c*) The various tariffs are tariffs for protection and revenue. Tariff for protection is a duty levied upon goods imported into the country to bring the outside manufactured articles up to a higher price than the articles manufacture in the U. S. Tariff for revenue is a duty on imports or exports as a tax to help pay government expenses.

(*d*) The south objected to protective tariff because it meant exportation of their cotton to Am. ports which paid less, the journey was more dangerous, and the north would be reaping all the benefits. The overlan route to the northern states was in such a condition it could not be traveled upon. The water routs contain dangerous points and the south would have to sell to the northern ports cheaper than to England and then pay a higher price for the manufactured article.

A set of questions and a copy of the answer paper were sent to some two hundred high schools in the Middle West with the request that the principal teacher of history grade this paper according to the practices and standards of the school.

One hundred and twenty-two papers were returned. Eight could not be used because the data were incomplete. Seventy were returned from schools whose passing grade was 75, twenty from schools whose passing grade was 70, twenty from schools whose passing grade was 80, and four from schools whose passing grade was 65. The comments and criticisms on the returned papers show that they were evaluated with much care and discrimination.

The values assigned by the seventy schools whose passing grade was 75 are shown in the distribution chart of Fig. 1. The range of the grades is indicated along the base line and the number of schools assigning a given grade is indicated by the number of dots above that grade. Thus the grade 70 was given to the paper by six

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different schools and the grade 71 by three different schools, etc. The distribution of these marks is very similar to that found for the English and mathematics papers. The extreme range extends from 43 to 92. The median value is 70.8 and the probable error is 7.7.

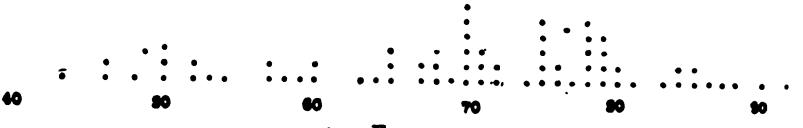

FIG. 1

The values assigned by the twenty schools whose passing grade was 80 are 70, 70, 83, 84, 80, 75, 71, 85, 62, 50, 53, 65, 80, 76, 75, 72, 55, 75, 78, 75. The median grade is 74.8. The values assigned by the twenty schools whose passing grade was 75 are 45, 60, 51, 65, 72, 75, 65, 63, 61, 18, 35, 88, 77, 77, 48, 66, 70, 67, 67, 55. The median grade is 65. The four schools whose passing grade was 65 returned marks of 66, 40, 76, and 52.

The chief results of this series of investigations may be summarized as follows:

1. The marks assigned to the same paper by different teachers vary enormously, in fact much more widely than the average teacher would anticipate. The findings with the history paper fully corroborate the findings with the English and mathematics papers. The range and distribution of the marks of papers in these three subjects are almost identical. The extremes in each case extend nearly over the entire marking scale.

2. The variability or unreliability of marks is as great in one subject as in another. Contrary to current belief, grades in mathematics are as unreliable as grades in language or in history. The probable error is very nearly the same in all subjects, being 5.4 for the English grades, 7.5 for the mathematics grades, and 7.7 for the history grades. Hence the variability of marks is not a function of the subject but a function of the examiner and of the method of examination.

3. The immense variability of marks tends obviously to cast considerable discredit upon the fairness and accuracy of our present methods of evaluating the quality of work in school. No matter how much anyone may wish to minimize the utility of marks,

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they have, nevertheless, an indispensable administrative value from the standpoint of the school, and a real personal value from the standpoint of the pupil.

The chaotic status revealed by our present inquiry raises two rather important questions: First, what are the factors that produce such wide divergences in the evaluation of school work? And second, what may be done to secure greater uniformity and more objective reliability?

An answer to the first question has been worked out by means of tests conducted by one of the writers[1] and published elsewhere. These results may be briefly quoted here. There are four major factors that produce the variability of marks: "(1) Differences among the standards of different schools, (2) differences among the standards of different teachers, (3) differences in the relative values placed by different teachers upon various elements in a paper, including content and form, and (4) differences due to the pure inability to distinguish between closely allied degrees of merit." Taking the probable error of 5.4 found for the English grades, the special tests showed that the "fourth factor contributes 2.2 points, the third 2.1 points, the second 1.0 point, and the first practically nothing toward the total" probable error. Hence the largest factors are the fourth, third, and second.

The second problem is more difficult to solve. One suggestion would be the adoption by all schools of some uniform marking system such as is outlined in the article just quoted;[1] that is, in brief, the adoption of a scale with a definite number of steps and the preparation of a standard curve or table showing the number of times each particular step should in the long run be assigned. Courses in education should give instruction regarding the technique and methods of marking and evaluating school work. Teachers could thus be led to appreciate the problems involved and to make efforts toward greater uniformity.

Another possible suggestion would be the development and general use of standard tests and scales for measuring efficiency in all subjects similar to the ones already devised for arithmetic, composition, and handwriting.

[1] D. Starch, "The Reliability and Distribution of Grades," *Science*, XXXVIII, 630–36.

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THE STUDY OF FRENCH IN THE PUBLIC HIGH SCHOOLS OF THE UNITED STATES

FREDERIC LOCARD
Hyde Park High School, Chicago, Illinois

The two questions at issue are: Is it possible to teach French—I mean conversational French—in the public high schools? Admitting it to be possible, is it advisable?

It seems now fully demonstrated that the public high school has become the university of the middle class, for statistics prove that scarcely 4 per cent of the public high-school students, after graduation, enter the universities or colleges. Therefore the large majority of the students who pass through the public high schools come out of the middle class, and seem satisfied with the elementary education they receive in that public institution. They consider themselves sufficiently prepared for the battle of life. In my judgment, they ought to be, provided they avail themselves of the mutiple advantages so generously offered them by modern popular education.

Now, the question arises: Who is the person best qualified to teach conversational French? It seems rational to say that French nationality, backed by education and experience, is the absolute requisite for any person who claims to teach French. A German, an American, a Japanese may have mastered the French language to some extent, but, with few exceptions, the standard of his pronunciation will be always below that of any native Frenchman.

The next question is: Is French taught in the public high schools by native teachers? To answer that question, I shall take the city of Chicago as an illustration.

There are 23 teachers of French scattered in the 21 public high schools of the city of Chicago. Out of these 23 teachers 4 are French born, and may consequently be considered capable of imparting French pronunciation to their pupils. The other 19 are either American, German, Irish, or of any nationality except French. Some of them may speak French, but none of them is

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willing to boast of it. They use their French with wise discretion and creditable modesty, and rather depend on their grammar and lexicons to make up for their deficiency.

For the use of those teachers, the authors of the books placed in their hands have, with the assistance of the ever-obliging publishers, imagined a certain figurative pronunciation, a sort of phonetic code, spelled in hieroglyphic signs, placed next to each French word in the vocabulary. This is intended to imitate French sounds and inflections. To me, this sounds more like Chinese, although, I must confess, I have a very imperfect knowledge of that language. To the French-born teacher, this grotesque arrangement is an object of horror, as it hinders him seriously in his work because of its irresistible attraction for the majority of his pupils who, in spite of repeated warnings, are bound to resort to it outside of the classroom. Moreover, it has the disastrous effect of creating in the mind of the students such confusion that it becomes impossible for them to spell a French word correctly. By means of this scientific device, those teachers are expected to inculcate in their students the fundamental principles of the language of Molière and Victor Hugo!

Out of the five French-born teachers referred to above, four have passed the fifty mark some years ago, which means that their teaching days are numbered. When they drop out of active service, they will be replaced by substitutes, until the whole French teaching body is in the grip of the mysterious code of imitative pronunciation.

Such are the present conditions of French teaching in the public high schools of Chicago, and Chicago may well congratulate itself, for there is not another city in the West that can boast of so many native French teachers in its public high schools. I took this one city only as an example. *Ab una disce omnes.*

Therefore it appears evident that the time is not far distant when the study of French in 90 per cent of the high schools in the United States will be on the same footing with Latin and Greek. This must come to pass.

This state of thing is due to the fact that the small number of French people who emigrate into this country stop in New York, Boston, Philadelphia, and the larger cities of the East, and settle

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there. A few venture to the Middle West, none to the far West. In fact the French are poor colonists; they rarely desert their native land. The number of French people living in Chicago is very limited; they belong, mostly, to the working class, and are, as a rule, thrifty and law-abiding. Some of them excel in the culinary art where their services are highly appreciated and amazingly compensated. In comparison, the native French teachers make a poor showing.

It is now evident that the teaching of the French language in the American public high schools, so far as the speaking of it is concerned, is impracticable, utterly impossible, absolutely hopeless. It is a dream, and should be sent back to dreamland, where it belongs. The days of the French-born teachers are nearly over; none will come to succeed them, and, after all, it is just as well, as their deficiency in English pronunciation and ignorance of the American temperament make them utterly unfit for good discipline.

A few years ago I had the good fortune to judge of the merit of the French taught in the Denver public high schools. A girl was introduced to me who had graduated a few months before, and was on her way to Smith College. I profess the highest respect for the Denver high schools and do not mean in the least to speak in disparagement of them, but, to be polite, I must say that the French spoken by that Denver girl was rather picturesque. Decidedly, the Denver brand did not compare favorably with the Chicago article!

I can fairly imagine how she was received by the sophisticated French professors of the aristocratic eastern institution. For the last ten or fifteen years a small number of graduates from certain Chicago high schools have been welcomed by the Smith French professors, but the supply is limited, and will soon be exhausted. Real French speaking will become a thing of the past in the public high schools. French will figure only as an ornament in the official curriculum. Within ten years, it will be classed among the dead languages. A few faithful lovers of the French language will find an everlasting consolation in the phonograph, the always handy professor with the genuine Parisian twang.

The second question now arises: Is conversational French in the public high schools advisable? For this question I shall again take Chicago as an illustration.

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What are the means by which a student can keep in constant touch with a certain subject for an indefinite period after leaving the high school? I know of only two: either by conversing, speaking, attending lectures, participating in conversations and debates, or by reading and writing.

Out of the two thousand pupils who graduate every year from the Chicago public high schools, 97 per cent belong to the middle and the working classes, people in various stations in life, some in good circumstances, some struggling for a livelihood, some poor. The other 3 per cent are the wealthy, those who move in high society, travel, go abroad, tour around the world, thus keeping up, improving, and completing their education through the ever-changing scenes and spectacles displayed before them.

The 97 per cent who compose the large majority will, shortly after leaving school, scatter in every direction, entering various careers and professions. A great number take a course at some business college, which opens for them a large field in the commercial world.

Now, is this great mass of former French students liable ever to practice the study of French in its conversational form? Will they move in society where French is spoken? Can they afford French professors, tutors, or companions? Will they go to France to practice their French? Will they find in this or other cities occasions to practice it, or attend meetings, lectures, or plays in French? In short, is there any chance, any probability, of their finding a practical use or application of the French they have learned to speak in the public high schools?

No, the frail sentences they had at their command will soon vanish for lack of practice, and a year after leaving school, no trace, no vestige of them will be left. I do not hesitate to say that hundreds, nay, thousands of former French students stand ready to bear out my statement. They are now sorry for the many weeks and months they were unconsciously and foolishly made to waste in phonetics, in superhuman efforts to acquire a pronunciation for which they have no use, to the detriment of a thorough training in grammar which would now enable them to apply their study of French to some practical use, that is, to reading the French language either in the fields of science, commerce, and industry, or in the

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realm of literature, from the great French classics to the *roman en vogue* of the present day.

It is no use trying to combine conversational and grammatical French in a class of forty pupils, especially if, in compliance with certain orders, French must be the exclusive language of the classroom at the very start, and the use of English strictly prohibited. The session opens with the inevitable drill in phonetics, then the wave of painful and laborious questions and answers is fairly under way when the bell rings and the 47-minute session is over, and the grammar is left in the cold—I mean in the desk. But I must say most of the pupils are strongly in favor of that method; it naturally appeals to them, for it nearly does away with the grammar, and young people hate grammar, as proved by their blatant deficiency in English.

An attempt to teach both grammatical and conversational French in a large class, and teach both correctly and thoroughly, is a fruitless attempt; one must be detrimental to the other; the intellectual element is too heterogeneous or refractory; the general spirit lacks congeniality, harmony, and uniformity. The popularity of that teaching under such conditions is based exclusively on its groundless reputation and deceitful attractiveness.

In the public high schools of France, English is taught according to that method, and with great success. Teachers are not allowed to use French in the classroom. In Paris, as in almost all the large cities of France, English is spoken in every shop, café, restaurant, theater, and public building. In Paris alone, there is an English-speaking population of one hundred and fifty thousand persons, and one can make the trip from Paris to London in six hours. In Chicago, the French-speaking population is limited to about three hundred, and it takes at least ten days to cover the four thousand miles that separate the metropolis of the West from the capital of France.

I have been told that there is more German spoken in Chicago than in Berlin. I suppose this refers to the quantity. It shows that, in order to practice the study of German, a pupil has only to go out of his home and talk German to the first person he meets. If he fails in his attempt, he is sure to be successful in a second encounter.

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It is easy to understand that French speaking is successfully taught in private schools, where classes are very small, and pupils are paying a good price for what is considered a social accomplishment. The high school is a public, and, therefore, a democratic institution, from which "fads" ought to be "kicked out," to use the rather emphatic expression of a prominent member of the Chicago Board of Education. When pupils take up the study of Latin and Greek in the public high schools, they do not do so with the expectation of ever using those languages in their daily life, whether it be in Chicago, Denver, or San Francisco. Those languages are taught with a view to training the mind, impressing their relation with the English language, and explaining the etymology of most of the words applied to sciences and modern inventions.

Sad though it be, 97 per cent of the students of French in the public high schools will make no more use of French in their daily life than they will of Latin and Greek, so far as speaking French is concerned, owing to the deplorable fact that they will never be able to put it into practice and will naturally and unquestionably forget it. Therefore, conversational French in the public high schools should be classed among the "fads." A truly democratic educational system is founded on practical, rational, and permanent instruction rather than short-lived social accomplishments.

A French-born teacher would find much more satisfaction in the adaptation of the method employed in private schools to the large classes which confront him in the high schools, were this adaptation a possibility. The immediate results are gratifying, and apparently convincing. On a visitor it has an astounding effect, especially if the visitor has only a slight smattering of French. He will follow the proceedings with intense interest; he will be amused by the eagerness of the students to answer questions; he will be favorably impressed with the cheerful atmosphere of the classroom; he will enjoy the show; he will find no words to express his admiration for the teacher and his method. And if he is, perchance, a man of standing and influence, he will occasionally say a good word for that teacher: it may help his promotion.

On the other hand, grammar is a dry subject. Syntax contains no poetry. Idioms are not conducive to humor. On a visitor

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the impression will be oppressively tiresome, especially if he happens to be a former "flunker" in English. He will soon yawn distressingly, and furtively sneak away from the room, carrying with him a most pitiable opinion of the teacher and his *modus docendi*.

If, on the contrary, he has mastered his own language, if he finds intellectual enjoyment in comparative philology, he will follow with interest the vivid demonstrations on the blackboard and the lively and instructive discussions they arouse among the students, the Latin quotations and the etymological study derived therefrom, the careful analysis of every part of speech, the logical construction of every sentence—in short, all that helps train the mind and enables the student to acquire a perfect and permanent understanding of a modern language of high standard.

It goes without saying that after one year of a thorough grammatical training, French could easily be the language of the classroom the second year, providing the teacher in charge happened to speak French, which is seldom the case.

However modern a language may be, it will fall into desuetude in countries where its use is occasional, and eventually become discarded. All the good-will and heroic efforts of a handful of teachers to keep it alive will prove powerless, and their laudable ambition will have to yield to the inevitable.

The exclusive private schools and fashionable colleges will remain the final home of conversational French in this country, while the democratic public schools, both elementary and high, will keep on being the educational melting-pot for children of all races, colors, and conditions, where German is an established necessity and French an unknown luxury.

But, in spite of the regrettable fact that, for reasons explained above, French is so rarely spoken in the United States, France stands among the leading nations of the world, and the French language is one of the most popular and instructive living languages.

That French literature is appreciated and enjoyed in the city of Chicago is evidenced by the fact that nine thousand persons, mostly students or former students, applied for French books at the public library alone during the year 1912. Those nine thousand people were either unable to speak French or to find anyone with

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whom to speak French, but they found in the public library the key to matchless treasures in every line of trade, industry, science, art, and letters.

As a matter of observation, at the beginning of every term, I always make it a point to inquire from a few among the large number of beginners what their object and purpose were in choosing French from the list of studies. Their answers do not vary materially. It happened that "French fitted their program," or they heard that French was "cute," or they were told French was a "cinch." After a week or so, however, a good many realize that French is far from being a "cinch," in spite of its probable "cuteness," and they hurriedly drop it, and replace it by whatever presents itself. On being asked whether their parents had been instrumental in their selection of French, those pupils, unhesitatingly, answer that their parents never interfered, never bothered with their children's course of studies, and that they were at liberty to choose whatever they pleased.

Were the parents interviewed on the subject, the mother would say she highly approves her daughter's selection of French on the ground that the family may some day take a trip to Paris, where the girl would be of priceless assistance in getting information from the chauffeurs, and in translating the various menus in the restaurants. The father flatly refuses to be interviewed.

This is all one can gather about their conception of the practical use of a foreign language. This seems to be the full extent of their interpretation of intellectual culture.

I have no authority to discuss here the momentous problem of elementary education. I may be allowed, however, to venture the opinion that so long as parents display such gross ignorance and criminal indifference toward their children's education, there will be no hope for improvement in this lamentable state of affairs.

It may easily be predicted that a perfect *entente* and intelligent co-operation between parents and teachers would result in wonderful changes. From such a collaboration would rise a new generation whose standard in scholarship and achievement in ethics and morals would form a wholesome contrast with the now-existing conditions.

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TOBACCO AND SCHOLARSHIP

THOMAS WARRINGTON GOSLING
Cincinnati, Ohio

A recent investigation in a large high school of the Middle West offers additional material for discussion in connection with the interesting question of the relationship between the scholarship of students and their use of tobacco. The facts were supplied by the one hundred and three boys of the Senior class. The percentage of error in the statements given is probably small, because in the first place the friendly relations between the instructor and his pupils were favorable incentives to truthful answers to the questions that were asked; in the second place, the boys were assured that any information which they might give would be used for statistical purposes only, and would not be used in any way to embarrass or to discredit them; in the third place, the answers were secured by a personal interview with each boy and not by the usual questionnaire method.

The following questions were asked:

(1) Do you smoke now, or have you ever smoked, cigarettes, cigars, or pipe?

(2) How old were you when you smoked for the first time?

(3) How long did you continue to smoke?

In addition, many, though not all, of the boys were asked to tell why they refrained from smoking; why they smoke now; or why they stopped smoking after having begun it.

The instructor then secured from the official school records the general average in scholarship for each of the one hundred and three boys for the first term of the present year—a period of about five months from September, 1912, to February, 1913. From these two sources—the answers of the boys and the official records of the school—the following summary was made:

1. Total number of boys included in the report (class of 1913), 103.
2. Number of boys who smoke, 45; or 43.7 per cent of the total.
3. Number of boys who do not smoke, 58; or 56.3 per cent of the total.

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4. Average scholarship record for the first term (1912–13) for the total number (103), 78.3 per cent.
5. Average scholarship record for the first term (1912–13) for those who smoke (45), 77.2 per cent.
6. Average scholarship record for the first term (1912–13) for the non-smokers (58), 79.1 per cent.
7. Number of smokers with scholarship record over 90 per cent, 2 (1.9 per cent of the total; 25 per cent of the group).
8. Number of non-smokers with scholarship record over 90 per cent, 6 (5.8 per cent of the total; 75 per cent of the group).
9. Number of smokers with scholarship record below 70 per cent, 8 (7.8 per cent of the total; 61.5 per cent of the group).
10. Number of non-smokers with scholarship record below 70 per cent, 5 (4.9 per cent of the total; 38.5 per cent of the group).
11. Average scholarship record for the 8 failures among the smokers, 66.9 per cent.
12. Average scholarship record for the 5 failures among the non-smokers, 69.4 per cent.
13. Average scholarship record for those who have never smoked (21), 81.6 per cent.
14. Average scholarship record for those who formerly smoked and then quit (37), 77.7 per cent.
15. The first five in rank among the whole number (103) are non-smokers.
16. The lowest six in rank among the whole number (103) are smokers.
17. The highest three in rank among the whole number (103) have never smoked.
18. Of the upper one-fifth of the class (21 out of 103),
    (*a*) 8 are smokers—7.8 per cent of the total, 38.1 per cent of the group.
    (*b*) 13 are non-smokers—12.6 per cent of the total, 61.9 per cent of the group.
19. Of the upper one-half of the class (53 out of 103),
    (*a*) 21 are smokers—20.4 per cent of the total, 39.6 per cent of the group.
    (*b*) 32 are non-smokers—31.1 per cent of the total, 60.4 per cent of the group.
20. Of the lower one-half of the class (50 out of 103),
    (*a*) 24 are smokers—23.3 per cent of the total, 48 per cent of the group.
    (*b*) 26 are non-smokers—25.2 per cent of the total, 52 per cent of the group.
21. Number of present smokers who began to smoke at 13 years or under, 18.
22. Scholarship of present smokers who began to smoke at 13 years or under (18), 75.3 per cent.
23. Number of present smokers who began to smoke at 14 years or over, 27.
24. Scholarship of present smokers who began to smoke at 14 years or over (27), 78.5 per cent.

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It is worthy of note that in every one of the comparisons between the class of smokers and the class of non-smokers, the advantage in scholarship lies with the non-smokers. In the first place the general average for the fifty-eight non-smokers is 1.9 per cent higher than the general average for the forty-five smokers. Even the failures among the non-smokers, with an average of 69.4 per cent, rank higher than the smokers who fail, for the latter have an average of only 66.9 per cent. In each of the groups where comparison was made, the non-smokers make the better showing, as is evident in Table I.

TABLE I

	1	2	3	4	5	6	7
	90 per cent or Above	Upper ½ of Class	Upper ½ of Class	Lower ½ of Class	Failures	First Five	Last Six
Non-smokers—							
Expected percentage	56.3	56.3	56.3	56.3	56.3	56.3	56.3
Actual percentage	75.0	61.9	60.4	52.0	38.5	100.0	0.0
Smokers—							
Expected percentage	43.7	43.7	43.7	43.7	43.7	43.7	43.7
Actual percentage	25.0	38.1	39.6	48.0	61.5	0.0	100.0

The "expected percentage" is the same as the percentage of the smokers or of the non-smokers in the total number. If there were no alternative causes, this general percentage would be uniform throughout all the groups. For that reason it is called the "expected percentage." Note that in the higher groups—1, 2, 3, and 6 of the table—the non-smokers exceed the expected percentage and in the lower groups—4, 5, and 7 of the table—they fall below the expected percentage, whereas the smokers reverse this record by falling below the expected in the higher groups and by exceeding the expected in the lower groups.

In regard to the second question—"How old were you when you smoked for the first time?"—the answers show that some boy yielded to the temptation at almost every age from six to eighteen. Out of the total number of one hundred and three, eighty-two have smoked at some time or other. Thirty-seven of these have abandoned the practice. The age of sixteen was the most dangerous age, as Table II shows.

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Some of the former smokers report that one experience with tobacco was enough for them, while others report that they have continued the practice of using tobacco for years.

The reasons given for refraining from smoking altogether or for discontinuing the practice are most interesting. Several boys state that they promised their parents to abstain and that they have kept the pledge. A pledge to mother or father seems to be a good anchor for a boy. Some boys stopped smoking because they realized that the practice was injurious; still others say that "there was nothing in it" for them. One boy frankly says that he was caught and that he has had no desire since; another says naïvely that smoking made him sick. The influence of a good companion is shown in the frank confession of a boy who reports that it was through the good counsel of a classmate that he was led to abandon the practice.

TABLE II

Age	6	7	8	9	10	11	12	13	14	15	16	17	18
Began to smoke..	1	2	0	3	8	4	11	4	11	11	14	11	2

The number involved in the present inquiry is too small to warrant any dogmatic statements or to justify any positive conclusions. The facts, however, do raise certain queries in the mind. For example, one wonders whether the habit of smoking is the cause of low scholarship, or whether there are several concomitant causes. One wonders, again, whether there may not be some common cause out of which issue independently both smoking and low scholarship. There comes a time to many boys when they no longer hold themselves to such strict adherence to their ideals as formerly; when they do not keep as firm a grip upon their conduct; when they do not hold themselves to such strict accountability; when they allow a certain relaxation of self-control. May not this lowering of personal standards of conduct, this relaxation of self-control, account for the habit of smoking, for low scholarship, and perhaps for other unfortunate habits of boys? If this be true, we are face to face again with the old problems. How can a boy be taught self-control? How can high ideals be made the ruling principles in the life of a boy?

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DISCUSSION

MODERN-LANGUAGE INSTRUCTION IN NORMAL SCHOOLS

When the first normal schools were founded in the United States in the late thirties and early forties of the past century, the modern languages were not made a part of the curriculum for the reason that there was no great demand for teachers in these subjects in the secondary schools. But as time passed, and the courses were enlarged and broadened, and as the modern tongues became a part of the course in our public secondary schools, French and German were added to the normal-school training, along with Latin and Greek.

It is a matter of interest to inquire whether under the influence of the study of education and educational methods in normal schools the method of instruction in modern languages has shown improvement beyond that found in the colleges and universities, which until late years have made but little of the study of methods.

This problem may be approached in various ways but it must be solved, no doubt, by a combination of several methods. The best method would be personal visitation of the classrooms by a competent judge. But since no one person is able to visit any great number of classrooms in the various sections of the country, we shall probably never have an estimate based entirely upon this method.

An auxiliary method is to note the textbooks used and the statement concerning courses and methods used in the schools as published in their catalogues. And finally acquaintance with the teachers themselves, their training, general scholarly activity, and the books they publish, forms a fairly reliable criterion of their classroom work.

For the purposes of this study personal visitation was made use of to some extent, principally in the schools of the Central West and the Northwest, and the results of such observations are included in the data on methods given below. Beyond this the methods in use were determined from catalogues, and more especially inferentially from the description of the courses in the catalogues.

As to the textbooks used in normal schools the decided tendency to use the less bulky grammars would indicate that less stress is laid on grammatical minutiae and more upon the ability to read, or to read and speak. Beyond this there is little divergence from the books used in colleges and universities.

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There is little information available concerning the preparation of the teachers of modern languages in normal schools, but it has been shown[1] that normal-school teachers as a whole have rather inadequate preparation and that inbreeding is prevalent in these schools. Certain it is that the teachers of modern languages do not figure at all prominently in the meetings of the Modern Language Association of America, nor in the various state and sectional modern language associations, as may be seen by running through the volumes of the publications. There are comparatively very few scholarly contributions by normal-school teachers. Meriam[2] has shown that the proportion of works by normal-school, high-school, and college teachers is 5, 13, and 48.

One should expect, however, that under the influence of the study of educational methods in the normal schools the teachers of the modern tongues would have become dissatisfied with our old style of textbooks and would have demanded better long ere now, when the direct method is being imported from Europe.

But such has not been the case. Rather have they been content to use much the same texts used in colleges and universities and even in the high schools. And they have furnished proportionally far fewer modern language texts than have the college teachers. An examination of the catalogues of four of the most prominent publishers of modern language texts in the United States discloses the fact that normal-school teachers have furnished less than 5 per cent of the grammars, introductory books, and manuals of composition and conversation published in this country.

However, after this rather adverse arraignment, which must certainly, in great part, be laid to the penny-wise-and-pound-foolish custom of overloading the teacher with teaching in these schools, it must be recorded that the teachers of modern languages in normal schools have made more rapid advance in the actual classroom use of the direct method than have their colleagues in the colleges and universities.

The direct method aims to teach the foreign language for the greatest part without the intervention of English. Grammar is thoroughly taught, although partially inductively, and in small instalments, while conversational ability is considered a valuable by-product. This method which is now in the opinion of most competent judges the most

[1] J. L. Meriam, "Normal School Education and Efficiency in Teaching," *Teachers College, Columbia University, Contributions to Teaching*, No. 1, New York, 1905, pp. 119 ff.

[2] *Op. cit.*, p. 149.

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effective is used in 13+ per cent of the 117 normal schools investigated,[1] but is used in only 5+ per cent of our colleges and universities (890 modern language departments investigated). And this must be attributed, it seems to me, to the emphasis laid on the study of methods in normal schools. Here is a group of teachers who in point of training and of time to devote to research are less fortunate than the college and university men. But they have, under the continual needs and inspiration of pupils whom they are training for a specific service, striven to give to their students not only a knowledge of the grammar and the literature, but of the spoken language as well. To be sure, this advance is not phenomenal but it is noticeable—as we will show still further.

The grammar-reading-conversation method is an excellent method. It consists in making the start with the grammar, in English, but reading forms the center of the instruction, with conversational ability as a third object. To achieve the last the texts are often discussed in German instead of merely translating the entire passage into English. This method is the most prevalent one in normal schools and is found in 51+ per cent of these schools, whereas it is used in only 37+ per cent of the colleges and universities.

The grammar-translation, or grammar-reading method, is a distinctly inefficient method which aims to teach by means of paradigms and set translation, after the time-honored fashion of instruction in the classics. This method is used in 42+ per cent of the colleges but in only 23+ per cent of the normal schools.[2]

CHARLES HART HARDSCHIN

MIAMI UNIVERSITY

[1] Space does not permit tabulating the entire data, but the normal schools investigated are distributed as follows: Alabama, 3; Arizona, 2; California, 4; Connecticut, 4; Colorado, 1; Georgia, 1; Idaho, 2; Illinois, 4; Indiana, 1; Iowa, 1; Massachusetts, 8; Maryland, 2; Michigan, 3; Minnesota, 6; Kansas, 2; Kentucky, 3; Louisiana, 1; Maine, 4; Missouri, 5; Montana, 1; Nebraska, 1; New Jersey, 2; New Mexico, 2; New York, 9; North Dakota, 2; Ohio, 4; Oklahoma, 2; Pennsylvania, 12; South Dakota, 3; Texas, 4; Virginia, 3; Vermont, 2; West Virginia, 4; Washington, 2; Wisconsin, 7. The more prominent schools were investigated. Seven of the list each taught no modern language.

[2] It may be of interest here to note some facts concerning the general status of the modern languages in the normal schools. For statistics on this instruction see the author's *The Teaching of Modern Languages in the United States*, United State Bureau of Education, 1912 (to appear soon).

German is, as might be expected, taught mostly in the Central West and the Northwest, while French is taught principally in the South and East. And it is specifically prescribed in some cases in New England. Spanish is taught in the normal schools of New Mexico, Arizona, Ohio, and sporadically elsewhere. Italian is found in only one school in our list. German is taught in 72 of these schools and French in 45.

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EDUCATIONAL NEWS AND EDITORIAL COMMENT

MEETING OF COLLEGE TEACHERS OF EDUCATION

The forthcoming meeting, in conjunction with the Department of Superintendence of the National Education Association in Richmond, Virginia, beginning February 23, 1914, will consist of two sessions and a luncheon. One session will be devoted to a report of the Committee on the Rating, Placing, and Promotion of Teachers, the chairman being Professor F. E. Thompson, of the University of Colorado.

The other session will take up a consideration of the significance of educational surveys for departments of education in colleges and universities. City surveys will be discussed by Professor Hanus, of Harvard, and state surveys by Professor Hillegas, of Columbia.

In addition to the papers presented at the sessions, the *Yearbook* will contain a bibliography of educational surveys by Professor Strayer, of Columbia, and a classified list of educational investigations now under way by members and their students, compiled by the secretary.

CARTER ALEXANDER, *President*

ASSOCIATED ACADEMIC PRINCIPALS OF NEW YORK

The twenty-ninth annual meeting of the Associated Academic Principals of the State of New York will be held in Syracuse, December 29, 30, and 31. The program of this important gathering is printed in full.

MONDAY, DECEMBER 29

2:00 Informal Meeting and Registration in the lobby of the Hotel Onondaga.

8:00 Joint Meeting with other educational bodies.
Address of Welcome—Superintendent P. M. Hughes, Syracuse.
Response—Principal Ernest L. Merritt, Gloversville.
Address—Subject to be announced: Dr. John H. Finley, Commissioner of Education and President of the University of the State of New York.

TUESDAY, DECEMBER 30

9:15 Report of Committee on Function of the High School.
General Report of Committee by Chairman, Professor George P. Bristol, Cornell University.
"The Peculiar Office of the High School in a System of Education, When Shall It Begin, How Shall It Be Expressed," Inspector E. W. Lyttle, Education Department.
Discussion.

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"The High School as an Aid to Better Citizenship," Professor George P. Bristol.
Discussion.

2:00 Address—"The Policy of the State in Determining the Qualifications of Her Teachers," Dr. Thomas E. Finegan, Third Assistant Commissioner of Education.
Discussion.

3:15 Report of Committee on Syllabus and Examinations, Assistant Superintendent L. F. Hodge, chairman, Yonkers.
Discussion.

4:00 Joint Meeting with other educational bodies assembled in memory of the late Commissioner of Education, Andrew Sloane Draper.
"Draper, the Man," Mr. H. H. Horner, Chief, Examinations Division.
"Draper's Contribution to New York State Education," Dr. William Nottingham, Regent of the University.
"Draper's Place in American Education," C. W. Bardeen, Editor of School Bulletin.
Report of Committee on Resolutions, District Superintendent Darwin L. Bardwell, chairman, New York City.

5:30 College and Fraternity Reunions.

8:30 Joint Meeting with other educational bodies.
Lecture furnished by the Syracuse Chamber of Commerce: "A Certain Arrogance in Educational Theorists," Dr. William H. Maxwell, Superintendent of Schools of the City of New York.

WEDNESDAY, DECEMBER 31

9:15 Question Box—Questions on University Scholarships, Medical Inspection of Schools, Miscellaneous, Dr. Charles F. Wheelock, Second Assistant Commissioner of Education.
Address—"Forestry and the Public Schools of New York," Dr. Hugh P. Baker, Dean of New York State College of Forestry, Syracuse University.
Report of Committees—(*a*) Legislation; (*b*) Athletics; (*c*) Necrology.
Report of Treasurer.
Election of Officers.
Introduction of President-elect.
Adjournment.

THE GRAND RAPIDS CONVENTIONS (OCTOBER 21–25, 1913)

The seventh annual convention of the National Society for the Promotion of Industrial Education, and the organization meeting of the National Vocational Guidance Association were held at Grand Rapids, Michigan, October 19 to 25.

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The citizens of Grand Rapids had made unusually thorough preparation for the reception of their guests, and the programs of both societies gave promise of rich reward to those who might attend them. It was to be expected that this would be the largest conference in the history of the National Society, and also would bring together a considerable number of those interested in the organization of the new Vocational Guidance Association. Even more significant than the notable increase in the number of delegates was the fact that they represented a much wider territory than formerly, indicating a spread of interest in vocational education and guidance toward the west and south.

THE NATIONAL VOCATIONAL GUIDANCE ASSOCIATION

As it seems desirable, for the purpose of this review, to consider as one convention the meetings of both societies, a prefatory word is necessary regarding the organization of the National Vocational Guidance Association.

This association is the outgrowth of a movement started in Boston in 1910 and brought to the point of organization at New York in 1912 when the Second National Conference on Vocational Guidance provided for an organization committee. This committee called the present conference and consummated the organization.

This new association has been brought into existence with the full appreciation of the fact that educational associations are multiplying rapidly. At the same time it was felt that the term "vocational guidance" had taken such a prominent place in the recent discussions of educational questions, and that so many widely divergent practices were being inaugurated in its name, that, for a time at least, the careful thought and earnest investigation of the men and women especially interested in this phase of social and educational work might be made more effective by purposeful joint action. Especially was it felt that the association might serve as an agent for the collection and distribution of information as to what is being done in different states in the furtherance of the purposes of vocational guidance.

GENERAL NATURE OF THE PROGRAM

The conference as a whole was marked by the emphasis given to the consideration of methods and to details of management rather than to the discussion of theories. However, there was due recognition of the fact that the movement is still new and that the majority of teachers, school officers, and employers, throughout the whole country, are only

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slightly interested and are therefore in need of such inspiration and enlightenment as only a great convention can give. The addresses which were given for this purpose, while relatively few, were excellent and effective, and the impetus given to the movement in Michigan alone, by this means, will be one of the important results of the conventions.

Papers relating to the larger social, economic, and educational phases of vocational education and vocational guidance were presented by such speakers as Mr. William C. Redfield, Miss Ida M. Tarbell, Professor George Herbert Mead, Mr. Owen R. Lovejoy, Miss Sophonisba P. Breckinridge, and Dr. Leonard P. Ayres. To recount the deeply significant lessons of these addresses would be impossible within the limits of this review but all emphasized the great need of developing a higher degree of efficiency in the workers of the rising generation, and contended that the recognition of this need was consistent with the highest social and educational ideals. Though inspirational in nature, these addresses generally based their theories on an accurate statement of accepted facts, rather than on visionary ideas of what society ought to be.

THESES OF VOCATIONAL EDUCATION

A few of the specific points of thoroughly practical application which were made in these inspirational addresses are as follows:

1. Vocational guidance and industrial education have already demonstrated their ability to retain children in school two or three years beyond the compulsory limit, thus extending the influence of our systematic, cultural education while training practical efficiency.

2. Guidance and training will increase *both* the income of the employer and the wage of the worker, and it is the duty of the educator to see that the benefit to the former does not overshadow the interests of the latter.

3. Our schools need the influence which the industries can exert over them quite as much as industry needs the help of the school. When this influence is rightly applied the school curriculum will be shot through and through with industrial interpretation.

4. While it may be necessary for many children early to become wage-workers, every effort should be made to save them from long periods of stultifying labor.

5. Traditional education has valuable characteristics which should be carried over into the new types of schools—stability, continuity, and balance.

6. The recurrent attacks on our schools by employers are futile but the interest and co-operation of the employer provide one of the most important doors through which the community gains admittance to its schools.

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7. Without the influence of the outside world the schools unconsciously exercise an unfortunate and negative vocational guidance for the majority of our early adolescent children. The forward educational movement is but a part of the great social advance in the midst of which the present generation is living, and consequently the social worker, who of necessity is a student of conditions as they are, wields an influence which is of first importance. These workers by scientific methods are gradually establishing a fact basis regarding industrial and social conditions, upon which the school authorities can safely rely and the school activities be securely built.

8. We should distinguish between the "emergency problem" with which we are now confronted and the working-out of a rational system of guidance and training for a later generation; in the former case we must make the most of the present available "jobs" and wise use of supplementary educational agencies, but choosing positions for people is preferable to choosing people for positions.

9. The employer of those whom we call unskilled factory workers has been caught in the maelstrom of fierce competition and needs not so much our criticism as our help, not alone for his sake but especially for the sake of his employees.

10. All this points to the supreme need of exercising patience "which means moving step by step."

THE NEW YORK VS. THE WISCONSIN PLAN

As noted above, most of the addresses dealt concretely with questions of method, but even these were not without their inspirational moments. Two such questions were: "Should Michigan have vocational education under 'unit' or 'dual' control?" and "Should Michigan have compulsory part-time education now or work toward it gradually by passing through the stages of voluntary schemes with state aid, local option later; this to be followed by state-wide compulsory law?" The discussion of these questions brought forth some of the finest statements of the fundamental principles which underlie industrial education that were made during the whole convention. But the issue was, in a very genuine sense, a "practical" one and might have been stated (as the names of the speakers would indicate) as follows: "Should Michigan follow the lead of New York state, or of Wisconsin, in providing for state-aided vocational education?" The speakers from Wisconsin were Louis E. Reber, dean of University Extension Division, University of Wisconsin, Madison, Wisconsin, and Warren E. Hicks, deputy superintendent for industrial education, state of Wisconsin, and from New York State were John Dewey, professor of philosophy, Columbia University, New

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York City, and Arthur D. Dean, chief of Division of Vocational Schools, New York State.

A large part of the discussion of these questions centered around certain "resolutions" which were issued in circular form from the office of the state superintendent of public instruction, Madison, Wisconsin, September 22, 1913, and upon which we commented editorially in our last issue. It may be said the Dr. Dewey's opinions were in substantial agreement with our editorial and that Mr. Dean's article will be found in full in the January number of the *School Review*. The representatives of the Wisconsin plan dwelt upon the efficiency of limiting or confining the work in the beginning to the training of self-supporting wage-workers in continuation schools, and of leaving to the future the development of breadth and catholicity.

THE TRAINING OF GIRLS AND WOMEN

The largest meeting of the convention was that held for the discussion of important questions relating specifically to the training of girls and women. The program might have been referred to under any of the classifications used in this review, for it was at once inspirational, informational, and constructive. This meeting shared with the meeting on legislation the distinction of presenting the only questions on which there was any actual controversy. It would seem that there are rational grounds for genuine differences of opinion as to whether "industrial training" or "home-making" should receive the major emphasis in the education of the girls and women for whose advancement the National Society for the Promotion of Industrial Education is working. That some girls need one kind of training to the exclusion of the other, that this question is one which pre-eminently demands consideration of the individual, and that there is danger of losing sight of the real issues in a cloud of uninformed sentiment was shown all too clearly.

THE PROGRAM IN PART

The papers which dealt in most minute detail with present and pressing problems confronting the educational and social worker in both vocational guidance and industrial education were as follows:

How Can the Evening School Best Meet the Needs of the Wage-Worker?

1. "The Use of the Short Unit Course in Part-Time and Evening Schools," Wesley A. O'Leary, director Evening Teachers' Training Class for Trade Workers, Pratt Institute, New York.

   A short unit course is a brief course or limited number of lessons meeting some specific and common need or requirement of a group

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of workers, such as blue-print reading for machinists, blue-print reading for carpenters, shop arithmetic for electricians, free-hand drawing for pattern-making.

Part-Time Schooling.

1. "The Development of Part-Time Education in a Large City," W. M. Roberts, district superintendent in charge of vocational schools and classes, Chicago, Ill.
2. "Part-Time Schooling for the Unskilled Industries," W. Stanwood Field, director evening and continuation schools, Boston, Mass.
3. "The Development of Part-Time Education in a Small City," S. O. Hartwell, superintendent of schools, Kalamazoo, Mich.

Vocational Guidance within the Public-School System. Chairman, Frederick G. Bonser, Teachers College, Columbia University, New York.

1. "By means of a System of Differentiated Courses," Alfred P. Fletcher, assistant superintendent of schools, Rochester, N.Y.
2. "By Systematic Courses of Instruction in Vocational Opportunities and Personal Characteristics," F. M. Giles, principal, DeKalb Township High School, DeKalb, Ill.
3. "By Developing 'Placement' and 'Follow-up' Work," Sophonisba P. Breckinridge, University of Chicago, Chicago, Ill.; Charles Marten, director of industrial arts, Jewish Orphan Asylum, Cleveland, Ohio.
4. "The Continuation Schools of Cincinnati as a Means of Vocational Guidance," E. D. Roberts, assistant superintendent of schools, Cincinnati, Ohio.

How Shall We Study an Industry for Purposes of Vocational Education and Vocational Guidance? Chairman, A. Lincoln Filene, member of Executive Committee, National Society, and president of Boston Vocation Bureau.

1. "From the Standpoint of Vocational Education," C. R. Richards, director, Cooper Union, New York.
2. "From the Standpoint of Vocational Guidance," Frank M. Leavitt, University of Chicago, Chicago, Ill.

PRINTED REPORTS AVAILABLE

It may be stated here that it is expected that the papers read before the National Vocational Guidance Association will be issued as a bulletin of the United States Bureau of Education. The proceedings of the National Society for the Promotion of Industrial Education are issued from the office of the society in New York City. In this connection may be mentioned the report of the Committee on the Certification and Training of Teachers. This report represents the work of a special committee, Mr. A. Lincoln Filene, chairman, appointed last year to consider this most important question. While revisions are still to be

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made, the tentative report which is now in print will be of great value to those who are organizing industrial schools or classes.

Meetings of the local women's clubs, teachers' associations, the Association of Commerce, the Central Labor Union, the official representatives of state departments of vocational education, and the Sunday services in the churches all offered opportunities for spreading the information relating to this great movement to improve the opportunities for genuine popular education. Eighteen addresses were made at morning and evening services in the churches on the Sunday preceding the convention and the last conference was held Saturday afternoon, thus filling the week completely with discussions related to vocational guidance and industrial education.

While not wholly pedagogical, the convention was pronounced by one of the best-known educators of the Middle West to be an educational convention of high order. In one respect it showed a marked contrast to most conventions of teachers where the same or kindred topics are discussed in that it was almost wholly lacking in violent and indiscriminate criticism of the public-school system. The whole conference gave one the impression that those present were determined to broaden the scope of the public schools so that these popular institutions will make for vocational efficiency in those who cannot have or who do not desire the extended schooling leading to the professional and directive vocations and to secure their social advance wherever possible, not alone by training but by employment supervision, if not by actual guidance into positions, and to maintain that such guardianship should be accepted by school authorities not only as a duty but also "as a rich opportunity and a consecrated pleasure."

F. M. L.

SEEKING THE RIGHT KIND OF CO-OPERATION

The following letter is suggestive of a new line of endeavor for the public schools:

MIDDLETOWN, CONN., September 2, 1913

To Prospective Employers of High-School Pupils or Graduates,
Middletown, Conn.

GENTLEMEN OR LADIES:

There are each year in our high school a number of boys and girls who need to work afternoons and Saturdays in order to pay their expenses while getting an education or who would be greatly benefited by some such work. Some pupils would be glad to work in exchange for board and room.

We have a form which these pupils fill out and which we keep on file for

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reference. It includes information concerning the age, the amount of education, the name and address of former employers and of references, the kinds of work previously done, the kinds of work that the pupil can do and prefers, and the time when and how much he or she can devote to out-of-school work. Besides this information, we learn from a personal acquaintance with the pupils and their progress and behavior in school considerable about the physical and mental fitness and general reliability for different kinds of work. Last year the greatest demand was not for boys but for girls, and the work was tending children or assisting in light housework.

While we cannot agree always to secure for a prospective employer just the sort of pupil he may desire for any work, still we shall be very glad to assist to the best of our ability in finding the right workman.

There is another very important part of this letter. What employment worth while can you offer any of our graduates, boys or girls, who on leaving us wish to enter such promising fields of work as their own city can offer them? Our graduates have been instructed in the following courses: the general or English, the classical and, after June, 1914, the commercial, the industrial and agricultural course for boys, and the practical arts course for girls, which course covers considerable instruction in drawing, home decoration, sewing, laundering, cooking, etc. If you wish to employ any of our graduates, or if you would care to do so, provided they were instructed and trained to do certain things not included in our present courses or to do them better than graduates in the past—if you need or may need the services of any of our graduates or if you have any suggestions to offer concerning the improvement of the education we give in high school, kindly feel free to communicate in full your needs and suggestions. We ask your co-operation in making our high school fulfill properly and adequately its function.

Did you ever think that one of the most serious as well as constant losses Middletown suffers is to allow annually the flower of her youth, the graduates from her local high school, to leave her borders in order to earn a livelihood? Are there practically no openings worth while as a life-work for our graduates here in Middletown? Is there any way the Middletown Business Men's Association or the Twentieth Century Club or anyone else can arrange so that we can save our city this irreparable loss of young blood, brains, and energy that should be kept here and made to build up a larger, better, busier, and more beautiful Middletown?

If you need the services of any of our students for part time or of any of our graduates or other students who may be obliged to leave school before graduation, kindly write us explaining fully and definitely the nature of the work, and the kind of pupil desired.

Thanking you for your co-operation, I am

Very truly yours,

W. A. WHEATLEY,

Superintendent of Schools

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CREDIT FOR OUTSIDE WORK

The Board of Education of St. Cloud, Minnesota, has adopted the most elaborate scheme for giving credit for outside work that has come to the attention of the *School Review*. The purpose, according to a bulletin published by the board, is to unite the home and the school, to connect the work of the school with things going forward outside, and to encourage the children to spend a part of their spare time at some useful occupation—in a measure to direct their work along the line of practical, everyday, homely tasks—to give all a chance and to train them for work and service, not merely the acquisition of knowledge, that they may the better fit into actual conditions about them—to prepare for complete living—to make the watchword, industrial, social, and home efficiency.

It will be noted below that the better class of students are given more opportunity to engage in outside work; the weaker students are allowed only one credit out of sixteen; and, safeguarding the whole plan, is the provision that a very large share of the students' time, at least $\frac{14}{16}$, is given to the older subjects of the curriculum. Following is given the plan as outlined by the Superintendent of the St. Cloud schools:

THE HIGH-SCHOOL DIPLOMA

For graduation 16 Units are required, at least 15 of which shall be regular school credits. One credit may be granted for systematic and definite home or continuation work as outlined below.

For *graduation with credit* 17 Units are required, two of which may be for home or continuation work. Standings must average Pass Plus or above 80.

For *graduation with honor* 18 or more Units are required, three of which may be for home or continuation work. Standings must average Pass double Plus or above 90.

Pupils may graduate on the old plan, with 16 or more regular school units. To graduate *with credit* on this basis an average standing of Pass Plus must be obtained, and for graduation *with honor* standings must average Pass double Plus.

OUTSIDE WORK

The following outside work when properly certified will receive credit as indicated:

Regular weekly piano, violin, cornet, pipe organ, or voice lessons, under an accredited instructor, $\frac{1}{4}$ Unit per year for not to exceed four years.

Active membership in any high school or approved city musical organization, $\frac{1}{4}$ Unit per year.

High School Glee Club or Chorus Work, $\frac{1}{4}$ Unit per year.

(Credit for music work is limited to $1\frac{1}{2}$ Units.)

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Literary Society Work, or Rhetoricals, Debate, Public Speaking, or Expressive Reading, ½ Unit per year.

Granite or paving-block cutting, or work in any of the local trades, shops, factories, or industries, ½ Unit for each summer vacation.

Clerking in store, bank, bindery, publishing house, or office, ½ Unit for three months.

Steady work on a farm, followed by a satisfactory essay on some agricultural subject, ½ Unit for three months.

Horticulture, gardening, poultry raising, or bee culture with essay, ½ Unit for one season.

Raising one-fourth of an acre of onions, tomatoes, strawberries, or celery, one acre of potatoes, two acres of pop-corn, five acres of corn or alfalfa, ½ Unit.

Running a split road drag or doing other forms of road building for three months, ½ Unit.

Judging, with a degree of accuracy, the different types of horses, cattle, and hogs, ½ Unit.

Selecting, drying, and testing seed corn, ½ Unit.

Faithful definite work in the home, with well-written essay on suitable topic, ½ Unit for three months.

China painting, oil painting, crayon, burnt wood, art, needle, or other handicraft or home decoration work, with exhibit, ½ Unit.

Three months' employment in a dressmaking establishment, ½ Unit.

Three months' employment as nurse, ½ Unit.

Three months' summer vacation travel, with written description, ½ Unit.

"See Minnesota First" trip, under approved instructor, with essay, ½ Unit.

HOME TASKS

The following home tasks when well done and certified by parent or guardian will represent ½ of one Unit or Credit:

1. Shingling or painting the house or barn.
2. Making a canoe or boat.
3. Swimming 300 feet at one continuous performance.
4. Installing three or more electrical conveniences in your mother's home.
5. Taking sole care of an automobile for one season.
6. Preparing one meal alone daily for three months.
7. Baking the bread for three months.
8. Cooking meat and eggs three ways and making three kinds of cake. Exhibit.
9. Making the beds daily for three months.
10. Doing the laundry work weekly for three months.
11. Making a waist, dress, or nightgown or other wearing apparel, or articles for the home.
12. Making a hat or cap.
13. Keeping a flower garden, with ten choice varieties of flowers.

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14. Recognizing and describing twenty different native birds, trees, and flowers.

15. Sleeping for one year in the open air or with open window.

16. Keeping a systematic savings-bank account for one year, with regular monthly deposits.

SUPPLEMENTARY STATEMENT

Thus succintly the superintendent summarizes important supplementary considerations:

The range of activities offers a wide choice and nearly every student who has been taught to help at home, or who works during vacation, will be able to make at least one unit. The credits are not to be given in lieu of any of the essential subjects now offered in the high school. A clear, concise backbone of academic work is retained. The plan is elective and suggestive and does not interfere in any way with the members of the advanced classes. Students are encouraged to work for extra credits and to graduate *with credit or honor*. No student, unless very mature, is allowed to graduate in three years. The aim is not to cut down the high-school course but to enrich it and so modify the curriculum as to shape the education of the boys and make them wage-earners whenever they find it necessary to become such, either through choice or by compulsion.

OUTDOOR SCHOOLS IN CALIFORNIA

Superintendent of Public Instruction Hyatt has just issued a small illustrated brochure dealing with the subject of outdoor schoolhouses in California. Its illustrations are based upon a Fresno example, a building that was constructed for "a trifle under $500," and concerning it Superintendent Hyatt says:

In appearance the building is tasteful and beautiful. It has no glass windows; yet the light through the canvas panels—which can be raised entirely around the building—is more perfect and more agreeable than in any other building. It has only one door. It is heated by a little airtight stove. It is so perfectly ventilated that the teachers and the children very much prefer it to any other. . . . . Naturally, canvas and screen wire are not as solid and permanent as brick and mortar; yet, the frame, floor, and roof being substantial, the canvas tight-stretched and the screening well put on, the building will give service for a number of years. It seems to afford all desirable protection against both wind and rain. In our California climate, it is much more wholesome in every way for the children than the proudest structure in the state.

The crux of the argument is suggested in the last sentence. In "our California climate" these outdoor schoolhouses are more desirable than they possibly can be in a climate more rigorous. In the east such schools may be considered an experiment. Here, where severe cold is unknown, their success cannot be doubted. It is as if nature herself invited to the outer air, and the effect of such air in revivifying the intellect beyond anything that artificial ventilation can do is understood.

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BOOK REVIEWS

The Sexual Life of the Child. By DR. ALBERT MALL. Translated from the German by DR. EDEN PAUL with an introduction by EDWARD L. THORNDIKE. New York: Macmillan, 1912. Pp. 339.

This is the most valuable and least dangerous treatment of this question that has come to the notice of the present writer. It is written by one who has studied the question both as a scientist and as a practicing physician frequently consulted regarding sexual matters, and yet who is never led by his specialism or by scientific theories to abandon his common-sense or to regard the occasional as the usual. The treatment of all topics seems coarsely frank as compared with most other books on this subject which nearly always leave some things to be inferred, yet it is this treatment which leaves nothing for the imagination to do, together with the fact that only essential facts are given regarding individual cases, that makes the book unattractive to those who gratify a low form of curiosity by reading of sex matters.

The topics treated are a historical view of the subject, a description of the reproductive organs, processes, and impulses, their differentiation in childhood and relation to other physical and psychical processes, the pathology, etiology, and diagnosis of sexual manifestations, the importance of the sexual life of the child, the child as an object of sexual practices, and finally an extended treatment of sexual education.

He makes some use of statistical studies but since such studies are not extensive, are often from selected cases and regarding matters concerning which there is much deception, he depends much upon general scientific principles, and common-sense, assisted by such facts as are available from observation, by himself and others, in deciding as to what is normal and what is abnormal.

He believes in the enlightenment of children regarding sex matters but thinks that the school should confine itself chiefly to general biological principles while personal instruction should be given by the mother if practicable. He thinks, however, that warning regarding venereal infection may be given in the last year of elementary schools.

E. A. KIRKPATRICK

FITCHBURG, MASSACHUSETTS

A Study of the Short-Story. By HENRY S. CANBY. New York: Henry HOLT & CO., 1913.

If one can follow the suggestion made by Mr. Canby, in his preface to an earlier work[1] on the same subject, and "put aside, at least temporarily, any

[1] *The Short-Story in English.* Henry Holt & Co., 1909.

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preconceived opinion of the nature of the short-story," he will find this author's *A Study of the Short Story* a profitable summary of the careers of various short-story types, considered generally as the expression of national temper under the influence of special conditions of time and place. But if the reader is handicapped at the start by an expectation of finding the discussion limited to examples of the brief, strongly unified, impressionistic story—the story whose essential elements of technique have been so eloquently summarized by Brander Matthews in the hyphen of his own term, "short-story," he may be a bit disturbed by finding *Euphues* and *Oroonoko* in its family tree. In the preface to the earlier work Mr. Canby confesses that, rhetorically, these are not short-stories, but goes on to say: "historically they are; for they carry on, and but half emerge from, short-story types." Being thus temporarily persuaded to accept Lilly's *Euphues* as a "dropsical short-story," one easily gulps down the idea that the "Elizabethan drama is the new short-story transformed into another type."

The only serious criticism that can be offered against Mr. Canby's general method is that he seems occasionally to be willing to evolve his types whether or no, and to overemphasize just a little the necessity of "placing" each variety of genius as a definite product of discoverable antecedents. Something like this effect, it must be admitted, awaits any historian who attempts to rationalize the erratic appearances of short-story art throughout the ages. And, as Mr. Canby never allows his theories to obscure his facts, the results of his investigations of the predecessors of the short-story will be of value even to one who does not share his point of view. Scholars will no doubt hold to the earlier work for its maximum of facts and minimum of theory; but the general reader will prefer the introduction to the new book as being clearer, more concise, and in many ways more readable. One who does not know at first hand the old types of story-telling will be grateful for Mr. Canby's concise summaries of the characteristics of those early "stories of life's lesser unities": the tales of Chaucer and Gower and the *Gesta Romanorum;* the *contes dévots;* the French cycles of miracles of Our Lady; saints' yarns of every sort; French *lais; fabliaux;* Italian *novelle; exempla*, apologues. But the happiest results of Mr. Canby's evolutionary method of criticism appear in his excellent sketch of the rise of the American short-story and his comments on the work of individual authors. The discussion is illustrated by the inclusion of eleven narratives (admittedly historical types and not "eleven best" short-stories either in matter or in technique). The examples are fairly well chosen, and comprise about two-thirds of the book; but one may venture to predict that the reader will find the real value of the work in the 77-page historical introduction. This is worth while even to one who is familiar with Mr. Canby's longer treatise.

E. M. ALBRIGHT

UNIVERSITY OF CHICAGO

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Training the Boy. By WILLIAM A. MCKEEVER. New York: Macmillan, 1913. Pp. i–xviii+3–368.

Among the various types of books on educational subjects two are easily differentiated: those which suggest thoughts and lines of work without entering fully into details and those that give a bill of particulars of the ways and means of attaining the desired end. To do the latter without writing platitudes is exceedingly difficult and for this reason, perhaps, is rarely attempted. The author of the book before us has, however, undertaken this task and has done it very well.

It would be impossible, in a brief review, even to approximate an enumeration of the subjects treated, because they include pretty nearly all of the active interests of boys. To the reviewer, the following passage seems to summarize the thought underlying the book: "It is really imperative that the small boy be provided daily with some constructive work-play activities. It is as natural for him to desire to build playhouses, mud-dams, and 'thing-a-bobs' of other sorts as it is for healthy grown men to desire and need wholesome occupation. *Therefore, one must learn to see things from the boy's point of view, and thus fall in with his childish plans and specifications for constructive play-work.*"[1] The entire book is an attempt to show in detail how this may be done. Beginning with the pre-school period, the author finds that the occupations of even these little youngsters must be planned for, that their training should be directed by a definite purpose. They should have something constructive to do.

Under the "Public School and Adjustment," "Vacation Employment," "Serious Industrial Employment," and "Sending the Youth to College," parents are given valuable advice and suggestions about getting their boys into the right mental attitude toward work. Social training is discussed as an outgrowth of play and recreation instead of being the result, as it is too often thought to be, of rules and prohibitions. Though the author does not say so, the reader is constantly, and properly, impressed with the thought that education and training are inseparable. The book is a protest against the view which divides the mind into compartments, one of which is to be filled with knowledge by the teacher and the other with precepts and maxims of conduct by institutions other than the school.

Those who have followed the author's previous work will not be surprised at the importance which he gives, in his treatment of habits, to the avoidance of tobacco and liquor, and to the relations between boys and girls.

Concerning vocational training the discussion is again sane. The author does not believe it wise to settle the boy's future occupation too soon, to thrust him into a vocation which, later, he may dislike. "Notwithstanding the advantage of every ordinary opportunity of training and schooling, some young men are very late in choosing a permanent calling." Stimulus and opportunity

[1] The italics are the reviewer's.

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to try oneself are necessary. "Now to stimulate him properly is to touch the nerve centers that seem to be awakening into activity, and to give opportunity is to furnish the specific means of practice called for at the time."

Finally, service training is considered in preparation for citizenship, for social service, home life, marriage and parenthood, and for religious life.

The book is suggestive and valuable for parents who are feeling their way and who, with the best intentions, are often wholly ignorant of the ways and means of helping their boys attain a high type of manhood. The excellent bibliographies, one at the end of each chapter, offer opportunity for further study and a wider outlook upon the subjects treated in the book.

EDGAR JAMES SWIFT

Correlations of Mental Abilities. By BENJAMIN R. SIMPSON. New York: Teachers College, Columbia University, 1912. Pp. v+122. $1.00.

What sort of mental abilities are most nearly related to "general intelligence"? What most differentiates a group of seventeen efficient graduate students and teachers from a group of twenty unemployed men hanging around the Salvation Army and a Bowery Mission in New York? These are questions which Simpson attacks in his Doctor's thesis. Using fifteen tests individually with each man in these extreme groups, he becomes confident that tests could be so selected that an hour's examination would give a very significant indication of the general ability of an individual. Not only does he believe that it is practicable to talk about "general intelligence," but he also believes it is possible to pick out certain relatively specialized capacities, such as sensory discrimination, motor control, quickness and accuracy of perception, which do not imply the presence of other capacities except to a very limited extent.

In determining which tests are most important for measuring "general intelligence" he groups those tests together which by the closeness of their correlations with one another and by their apparent similarity seem to reach special processes. Subject to the limitations of the experiment he finds that "general intelligence" implies the different abilities tested in the order given below. The figures are averages of the correlations of the tests in each group with the other tests: selective thinking, 0.59; memory, 0.50; association, exclusive of learning pairs, 0.48; quickness and accuracy of perception, 0.45; motor control, 0.26; sensory discrimination of lengths, 0.19.

The significance of the tests is also brought out clearly by tables which indicate the degree to which the "poor" group overlaps the "good" group in each test. Selective thinking again shows up as the important trait which accompanies efficiency. Not one of the "poor" group reaches the lowest of the "good" group in a combined score of five of the most distinguishing tests. Simpson argues for the view that "by far the most influential factor in making for efficiency in these tests is the native capacity of the individual in question, and not simply his training and environment." More years of schooling goes

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with higher rank in the combined result of the eight best tests with a correlation of only 0.38. Moreover, the striking differences between the two groups are found in the same traits in which the feeble-minded are shown to differ most from normal individuals.

An important part of the monograph is the summary and criticism of the work which has been done by other investigators, on the correlation of tested mental abilities. Simpson deprecates the emphasis which Binet placed upon the differences in the subjects' ability to adapt themselves to tests. He regards this as a much less fundamental indication of lack of general intelligence than the differences brought out by the tests in the higher mental processes themselves. He finds no justification from his results of Spearman's supposition of a hierarchy of mental functions, depending upon how closely each of these is related to a common central factor.

Taken all together the novelty of its plan and the clearness of its main conclusions make Simpson's monograph one of the most interesting that has appeared in the study of the relationship of mental processes.

J. B. MINER

UNIVERSITY OF MINNESOTA

Social Principles of Education. By GEORGE HERBERT BETTS. New York: Scribner.

In the preface the author posits the statement that education is an ever-changing ideal and has, through the evolution of society, come to be a social function having its highest values in terms of "social efficiency."

The reader is plunged at once into a splendidly arranged and most interesting discussion. Society and the individual, the two fundamental elements of social education, bear a complex, interdependent relationship one to the other, the result being that each is constantly modified. Society furnishes the medium, stimulation, and the criterion of activity, while the self-initiative of the individual makes social progress possible.

The second division of Part I considers the origin and the function of the educational aim, which can be found only in experience, since this aim is chiefly a statement of social progress already made.

Part II takes up the discussion of the social process, since it is here that the educational aim has its alpha and its omega. The nature of the social process may be shown either from the standpoint of the individual or from that of society. All the activities of men are included in the social process, and most of them are organized in the form of institutions, which leads the author to consider next some of the more important of these, such as the family, the church, the state, and the school.

Part III deals with the powers and the capacities of the individual, the mode of his development, the curriculum, which furnishes the leading stimuli for this development, and lastly with the social organization of the school.

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The two necessary factors in development are stimulus and response. Environment furnishes the stimulus, the response being conditioned by the inherited tendencies of the individual in the form of instincts and impulses. Since the school is the chief agency for presenting stimuli, the study would not be complete without some analysis of its organization. The intellectual organization of the school is represented by the curriculum, which has originated in society and represents the cultural values as defined by society. The evolution of the curriculum has been conditioned by tradition, educators, teachers, and by society itself.

Upon the whole the author seems to be discussing the principles underlying the social aspect of education, using the method and the authority of philosophy to discover and to establish them. It is only by keeping constantly in mind the author's own interpretation of the problem and scope of philosophy that the writer was able to harmonize the discussion all the way through with the title of the book. This philosophical trend of the author may also incidentally account for the inclusion of a discussion of the aim of education. A scientific treatment of the principles of education would not directly comprehend a discussion of the aim, without apology, since the principles of the educative process are not in any special way dependent upon the aim. Notwithstanding, however, these slightly confusing characteristics, together with the somewhat disappointing absence of many specific examples of the general principles discussed, the treatise represents a marked degree of originality and constitutes a valuable and illuminating addition to the literature in the field of education.

ROBERT A. CUMMINS

UNIVERSITY OF PUGET SOUND
TACOMA, WASHINGTON

Elements of Physics. By EDWIN H. HALL. New York: Henry Holt & Co., 1913. Pp. viii+576; 351 illustrations; 6 portraits. $1.25.

This book is an outgrowth of the third edition of Hall and Bergen's text in physics and shows many important changes and improvements over the original. There is more matter than can be thoroughly mastered in one year by the average secondary-school pupil. This is a good feature as it gives the teacher considerable latitude in the choice of topics. The separation of subject and laboratory matter is a wise provision, thus not interrupting the continuity of the reading. There are but few illustrative or lecture experiments, leaving more room for subject-matter. Throughout the book are scattered problems and exercises, which will help the reader in fixing the laws and principles already studied; the chapter on Molecular Attraction has been lengthened to twenty pages; the treatment of heat engines has also been improved by the addition of many important and up-to-date discussions; the subject of optics, likewise, has been greatly enhanced by the insertions of several interesting topics, and the discussion of electro-magnetism has been materially improved. The book is conspicuously free from those mathematical expres-

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sions which frighten the beginner of physics. It is a good book and merits an extensive adoption by schools.

There are fifty well-selected laboratory exercises at the back of the book, and a complete index of eight pages. The book is well made mechanically, the type is clear and large, the presswork admirable.

Bennett's Bookkeeping and Accounting Exercises. By R. J. BENNETT. New York, Cincinnati, and Chicago: American Book Co., 1913. Cloth, 12mo; Part I, 96 pages, $0.40; Part II, 112 pages, $0.45.

The first book consists of 39 exercises and 2 explanatory chapters. Ten of the exercises are devoted to the journalization of such accounts as Merchandise, Cash, Bills Receivable, Bills Payable, Expense, Property, Interest, Discount, Mortgages, Loss and Gain, Proprietor, Shipments, Consignments, Notes, Drafts and Stocks. These chapters employ a variety of expression and present within a brief space the important points under each topic. Nine chapters present short sets to be worked, one in which ledger only is used, one in which card ledger is employed, one in which there is a loose-leaf system, one in which student must rule all the papers himself, one in which single-entry books must be changed to double, one involving partnership, and one using special column books. Four chapters ask general review questions. These seem to lack the originality and character that is found in other parts of the book, but in the main they are fundamental. Four chapters discuss statements and give exercises on them. The author compares various kinds of statements. Two important chapters discuss the avoidance and detection of errors. Here the author gives the students valuable suggestions. Three chapters are devoted to the adjustment of accounts between firms and between individuals in the same firm.

The author states in his preface that the book is intended as a supplement to the ordinary textbook and as a test of the thinking ability of the students. He succeeds remarkably well. The book as a whole stimulates thought, presents old material in a new way, collects and summarizes information upon the various topics, and gives the atmosphere of the real business world.

Part II contains 21 exercises designed for advanced high-school or college students. Six chapters treat such topics of corporation accounting as the opening and closing of corporation books, changing firms to corporations, incorporation of going concerns, amalgamation of corporations, and questions on corporations. Two chapters discuss statements and reports. Two give review questions. There is one complete short set to be worked. The titles of the remaining chapters are Errors and Trial Balances, Branch Store Accounts, Consolidation of Business Firms, Stock Ledgers, Self-Balancing Ledgers, Designing Columnar Books, Insolvency and Reorganization, Financial Companies, Auditing and Investigations, and General Problems.

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The general merit mentioned in connection with the first book is also true of this.

Business Arithmetic for Secondary Schools. By ERNEST L. THURSTON. New York: Macmillan, 1913. Pp. 431. $1.00.

The text is divided into 47 chapters and treats the topics ordinarily found in these texts, such as Fundamental Processes; Fractions, Aliquot Parts, and Billing, Denominate Numbers, Percentage and Its Applications, Interest and Banking, Dividends and Investments, Proportion, and Partnership. In addition to these customary topics the author also discusses such subjects as the Algebraic Equation, Involution, Evolution, the Thermometer, Composite Units, Graphs, Co-ordinates, the Lever, and Formulae.

Before criticizing this text it may be well to say a word or two about the content of a course in business arithmetic. Vocational mathematics in high schools seems to be branching into two distinct channels. First there is the arithmetic necessary for the boy or girl who intends to enter an office, and second, there is the technical mathematics necessary for the boy who intends to enter the shop. The aim of the two courses must be substantially different. The office man must be able to handle a mass of figures accurately and speedily. The mechanic must be able to manipulate formulae and to apply the mathematics of his special trade. The textbooks for these two courses should be radically different, and any book which tries to straddle both courses is doomed to failure.

Turning to the text we find the author has reduced the drill work to a minimum and introduced mathematics for the mechanic. In his pages on fractions we find such fractions as $\frac{1}{22}$, $\frac{143}{360}$, $\frac{33}{88}$, $\frac{117}{140}$, $2\frac{1}{11}$, and $\frac{5}{11}$, and wonder why the author does not confine himself to fractions found in real business. In the preface the author informs us that, "Much thought has been given to problem work, and as one result considerable variety will be noticed in form of statement."

All of the criticisms, which we have made, relate to the author's plan and not to the treatment accorded each subject. He deserves credit for presenting the different topics in such a clear, concise style that the text should be valuable as a reference book for business men. It is in fact a reference, not a textbook.

The cover is too light for the book.

GEORGE A. BEERS

LAKE HIGH SCHOOL

Essentials of Physics. By GEORGE A. HILL. Boston: Ginn & Co., 1912. Pp. viii+344, illustrated. Price, cloth, $1.10.

This is a unique and practical text. The subject-matter is presented in a manner not often attempted. The author through his long experience as a physics teacher has arrived at the conclusion that the best way to present the subject to secondary-school pupils is by the question and answer method. Therefore, this text is filled from cover to cover with questions, hundreds of

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them. First come answered questions, in which just enough of the theory is given for the pupil to grasp the idea under consideration, these being followed by questions for the pupil to answer, and problems for him to solve. The questions are arranged in a careful and logical sequence. Most of the illustrations are aptly chosen and well executed. The treatment of the subject is clear and to the point. There is nothing in the book to omit, the topics being well chosen.

The mechanical work is perfect, presswork excellent, and the kind of type and its arrangement well selected. It is a book that will appeal to progressive teachers.

CHARLES H. SMITH

HYDE PARK HIGH SCHOOL
CHICAGO

School Organization and the Individual Child. By WILLIAM H. HOLMES. Worcester, Mass.: The Davis Press, 1912. Pp. 408.

In the words of the author, this book "undertakes the task of presenting in a somewhat detailed manner the various plans that have been evolved to make school organization fit the needs of the boys and girls, both normal and abnormal, that are enrolled as pupils in the public schools." To this purpose the author consistently adheres by giving few opinions or final conclusions of his own. Part I deals principally with problems of classifications. After a short historical account of class instruction and a discussion of the advantages and disadvantages of yearly promotions, the following plans are described: the "St. Louis Plan," the "Elizabeth Plan," the "Santa Barbara Concentric Plan," the "Cambridge Plan," the "Le Mars Plan," the "Portland Plan," the "Group System," the "North Denver Plan," the "Charlottenberg Plan," and the "Mannheim Plan." The advantages and disadvantages of each are enumerated. A general discussion of the relative advantages of class and individual instruction is followed by an account of the plans used at Pueblo, Newton, and Batavia and by suggestions as to how to give individual instruction and the need and means of training normal students for such teaching. Ungraded classes, gifted pupils, departmental teaching, manu-mental schools, classes for stammerers, and finally the Montessori methods are described.

Part II treats chiefly of schools and classes for defective children and an account of such schools in many countries and cities is given. In this connection the Binet tests are described; also the after care of defective children.

In the appendix are to be found details as to regulations and programs of special schools in various cities, tests, record sheets, and finally a bibliography. The book contains an index but no table of contents. Anyone desiring to post himself as to what has been and is being done for special types of children without going over a large amount of scattered literature will find the book very useful.

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BOOKS RECEIVED

ENGLISH

Calhoun, Dorothy Donnell. When Great Folks Were Little Folks. New York: Macmillan, 1913. Pp. xi+174. $0.40.

Faculty, Columbia University. Lectures on Literature. Columbia University Press, 1911. Pp. viii+404.

Heydrick, Benjamin A. Types of the Short Stories. Chicago: Scott, Foresman & Co., 1913. Pp. 305. $0.30.

How, Will David. Selections from William Hazlett. Boston: Ginn & Co., 1913. Pp. lxix+398. $0.20.

Lewis, Homer P. and Elizabeth. Lippincott's Fourth Reader. Philadelphia: J. B. Lippincott Co., 1913. Pp. 336.

Lillard, W. Huston. Hughes's Tom Brown's School Days. Boston: Henry Holt & Co., 1913. Pp. xxxi+383. $0.45.

Lyon, Leverett S. Elements of Debating. Chicago: The University of Chicago Press, 1913. Pp. ix+136. $1.00.

McConaughy, James L. The School Drama. Columbia University, 1913. Pp. 116. $1.00.

Payne, Leonidas Warren. Southern Literary Readings. Chicago: Rand McNally & Co., 1913. Pp. 485. $0.75.

Sawin, Rosa L., and Palmer, Frank H. (collected and edited by). "Right-at-Hand Stories." Boston: Palmer Co. Pp. 210.

Watkins, Dwight Everett. Public Speaking for High Schools. New York: American Book Co., 1912–13. Pp. 183.

HISTORY

Browning, Oscar. A General History of the World. New York: Longmans, Green & Co., 1913. Pp. x+797. $1.50.

Fling, Fred Morrow, and Helene Dresser. Source Problems on the French Revolution. New York: Harper & Bro., 1913. Pp. xiii+335.

Hodges, George. Classbook of Old Testament History. New York: Macmillan, 1913. Pp. xi+222. $0.70.

Johns, C. H. W. Ancient Babylonia. Cambridge University Press, 1913. Pp. 148. $0.40.

Mawer, Allen. The Vikings. Cambridge University Press, 1913. Pp. 150. $0.40 net.

Siglo, En El. La Conquesta de Chile. Santiago de Chile: Imp., Litografia y Enguadernacion "la Illustracion," Moneda 855, 1909. Pp. 243.

NOTE.—In the review of *American Poems* by Walter C. Bronson, printed in the November, 1913, number of the *School Review*, the price is erroneously quoted. The net price is $1.50 and postpaid, $1.68.

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Stephenson, Nathaniel Wright. An American History. Boston: Ginn & Co., 1913. Pp. xi+604.

MISCELLANEOUS

Baldwin and Newton. Fifty Standard Hymns. Pp. 32. $0.10.

Bigelow, Maurice A. and Anna N. Introduction to Biology. New York: Macmillan., 1913. Pp. ix+424. $1.10.

Bogardus, E. S. An Introduction to the Social Sciences. California: Ralston Press. Pp. 204.

Byrnes, James C., Richman, Julia, and Roberts, John S. Pupils' Arithmetic. (Book Five.) New York: Macmillan, 1913. Pp. viii+258. $0.40.

Hoadley, George A. Essentials of Physics. New York: American Book Co., 1913. Pp. 536. $1.25.

Stackpole, Markham W., and Ashton, Joseph N. Hymns for Schools and Colleges. Boston: Ginn & Co., 1913. Pp. xxv+263. $1.25.

Stamper, Alva Walker. A Textbook on the Teaching of Arithmetic. New York: American Book Co., 1913. Pp. 284.

EDUCATION

Altmaier, Carl L. Commercial Correspondence and Postal Information. New York: Macmillan, 1913. Pp. xiv+252, $0.70.

Buckingham, B. R. Spelling Ability. Columbia University Press, 1913. Pp. viii+116. $1.25.

Chapin, F. Stuart. Introduction to the Study of Social Evolution. New York: Century Co., 1913. Pp. xxii+306. $2.00.

Encina, Francisco A. Nuestra Inferioridad Economica, sus Causas, sus Consecuencias. Santiago de Chile: Imprenta Universitaria, Bandera 130, 1912. Pp. 364.

Finkelstein, I. E. The Marking System in Theory and Practice. Baltimore, Warwick & York, 1913. Pp. 88.

Galdames, Luis. Educacion Economica e Intelectual. Santiago de Chile: Imprenta Universitaria, Bandera 130, 1912. Pp. 247.

Garber, John Palmer. Current Activities and Influences in Education. Philadelphia: J. B. Lippincott & Co., 1913. Pp. 370.

Hering, Edward. Memory. Chicago: Open Court Publishing Co., 1913. Pp. 70. $1.00.

Holmes, Arthur. Principles of Character Making. Philadelphia: J. B. Lippincott Co., 1913. Pp. 336.

Kirby, Thomas Joseph. Practice in the Case of School Children. Columbia University, 1913. Pp. vi+98. $1.00.

Marshall, Leon Carroll, Wright, Chester Whitney, and Field, James Alfred. Materials for the Study of Elementary Economics. Chicago: The University of Chicago Press, 1913. Pp. xvii+927. $2.75.

Moore, Ernest C. How New York City Administers Its Schools. New York: World Book Co., 1913. Pp. x+321.

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Nichols, Frederick G., and Rogers, Ralph E. A Short Course in Commercial Law. New York: American Book Co., 1913. Pp. iv+300. $0.80.

Patzer, Otto. Un Mariage D'Amour. Boston: Ginn & Co., 1913. Pp. vii +63. $0.25.

CURRENT EDUCATIONAL LITERATURE IN THE PERIODICALS[1]

IRENE WARREN
Librarian, School of Education, the University of Chicago

Abbott, Allan. A high-school course in periodical literature. English J. 2:422–27. (S. '13.)

Addresses by citizens to school boys. El. School T. 14:117–31. (N. '13.)

Alton, Margaret. The mental value of the study of English grammar. Educa. 34:78–80. (O. '13.)

Anderson, L. F. The manual labor school movement. Educa. R. 46:369–86. (N. '13.)

Babcock, E. B. The use of phonetics in teaching elementary French. School R. 21:608–17. (N. '13.)

Bawden, William T. Agricultural education thru home projects: the Massachusetts plan. Voca. Educa. 3:86–105. (N. '13.)

Bennett, Charles A. Newcomb school of art: its relation to art industries. Voca. Educa. 3:119–25. (N. '13.)

Blaine, Anita McCormick. The ideals which led to the founding of the School of Education. El. School T. 14:73–81. (O. '13.)

Bowder, Witt. Education for the industrial advance of the wage-earner. Educa. 34:69–77. (O. '13.)

Bristol, George P. High school graduation and college entrance. Educa. R. 46:325–29. (N. '13.)

Brooks, E. C. Seven, eight, and nine years in the elementary school. El. School T. 14:82–92. (O. '13.)

Coover, J. Edgar. The Union High School questionnaires. Educa. 34:81–94. (O. '13.)

Corbin, John. The struggle for college democracy. Cent. 87:80–87. (N. '13.)

Crawshaw, F. D. The relation between and the control of manual arts and vocational education. El. School T. 14:107–116. (N. '13).

[1] *Abbreviations.*—Atlan., Atlantic Monthly; Cent., Century; Colum. Univ. Q., Columbia University Quarterly; Educa., Education; Educa. Bi-mo., Educational Bi-monthly; Educa. R., Educational Review; El. School T., Elementary School Teacher; English J., English Journal; J. of Educa. Psychol., Journal of Educational Psychology; Lit. D., Literary Digest; Pop. Sci. Mo., Popular Science Monthly; Psychol. Clinic, Psychological Clinic; R. of Rs., Review of Reviews; School R., School Review; Voca. Educa., Vocational Education.

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Curtis, Henry S. The rural church as a social center. Educa. 34:111–18. (O. '13.)
Dingee, Gertrude P. The value of Latin in the high school. Educa. Bi-mo. 8:23–27. (O. '13.)
Earle, Samuel Chandler. The organization of instruction in composition. English J. 2:477–87. (O. '13.)
Egbert, James C. Extension teaching at Columbia. Colum. Univ. Q. 15: 366–71. (S. '13.)
Flexner, Abraham. The German side of medical education. Atlan. 112: 654–62. (N. '13.)
Gaston, George H. A bibliography for the study of the history and government of Chicago. Educa. Bi-mo. 8:81–87. (O. '13.)
Glenny, Mrs. Bryant B. How may a community make a study of its schools as opportunities for vocational education? Voca. Educa. 3:79–85. (N. '13.)
Greenwood, James M. How New York City administers its schools. Educa. R. 46:217–28. (O. '13.)
Groszmann, Maximilian P. E. A tentative classification of exceptional children. Child (London) 4:33–39. (O. '13.)
Grupe, Mary A. How the problems of the rural schools are being met. Pop. Sci. Mo. 83:484–90. (N. '13.)
Heniger, A. Minnie Herts. The drama's value for children. Good Housekeeping 57:636–43. (N. '13.)
Hooper, Cyrus L. The Cornman and Wallin spelling tests. Educa. Bi-mo. 8:28–41. (O. '13.)
Hosic, James Fleming. The advance movement of teachers of English. Educa. 34:99–103. (O. '13.)
———. Co-operation of all departments in the teaching of English composition. School R. 21:598–607. (N. '13.)
Howerth, Ira W. The apportionment of school funds. Educa. R. 46: 273–84. (O. '13.)
Hughes, Helen Sard. "Literature for children": a protest. English J. 494–99. (O. '13.)
Inglis, Alexander. The distribution of pupils in the public high schools. Educa. R. 46:344–50. (N. '13.)
Jennings, H. M., and Hallock, A. L. Binet-Simon tests at the George Junior Republic. J. of Educa. Psychol. 4:471–75. (O. '13.)
Jones, Adam Leroy. Some new methods of admission to college. Educa. R. 46:351–60. (N. '13.)
Klapper, Paul. A judgment of the New York City schools. Educa. R. 46: 335–43. (N. '13.)
Lewis, J. C., Hoke, K. J., Welles, J. B., and Wilson, G. M. Accuracy of pupil reporting. Psychol. Clinic 7:135–41. (O. '13.)
Long, Percy W. Grades that explain themselves. English J. 2:488–93. (O. '13.)

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(The) lost years of the schoolboy. Lit. D. 47:681. (18 O. '13.)
McKitrick, May. The adaptation of the work in English to the actual needs and interests of the pupils. English J. 2:405–16. (S. '13.)
Maclear, Martha. The Froebel fetich. Educa. R. 46:330–34. (N. '13.)
McManis, John T. Chicago schools and child welfare. Educa. Bi-mo. 8: 42–50. (O. '13.)
Mardorf, Mae F. Contributions to nature-study from the Chicago schools. Educa. Bi-mo. 8:78–80. (O. '13.)
Miner, James Burt. The scientific study of child development. Pop. Sci. Mo. 83:506–13. (N. '13.)
Molter, Harold. Practical suggestions for the teaching of sex hygiene. Educa. 34:95–98. (O. '13.)
(The) Montessori schools in Italy—an account based on personal visits by two Americans. Lit. D. 47:637–38. (11 O. '13.)
(The) need of more romantic mathematics. Current Opinion 55:260. (O. '13.)
Otis, Margaret. The Binet tests applied to delinquent girls. Psychol. Clinic 7:127–34. (O. '13.)
"Peopleizing" the museums. Lit. D. 47:757. (25 O. '13.)
Roberts, William M. Classes for apprentices in the Chicago Public Schools. Educa. Bi-mo. 8:16–22. (O. '13.)
Rounds, C. R., and Kingsbury, H. B. Do too many students fail? School R. 21:585–97. (N. '13.)
Schinz, Albert. Difference between the work of the high school, college and graduate school. Educa. R. 46:237–51. (O. '13.)
Schroeder, H. H. A real problem for educational psychology. J. of Educa. Psychol. 4:465–70. (O. '13.)
Sex education as its friends and its foes view it. Current Opinion 55:261–62. (O. '13.)
Starch, Daniel. The measurements of handwriting. J. of Educa. Psychol. 4:445–64. (O. '13.)
Sykes, Marion. Failures in the high school. Educa. Bi-mo. 8:8–15. (O. '13.)
Venable, Francis P. A question of morals. Educa. R. 46:361–68. (N. '13.)
Wells, Dora. An experiment in applied household science. Educa. Bi-mo. 8:1–7. (O. '13.)
Winter, John G. Greek and Latin in the schools of Belgium. School R. 21:618–26. (N. '13.)
Woolley, Helen T. Facts about the working children of Cincinnati, and their bearing upon educational problems. I. El. School T. 14:59–72. (O. '13.) II. 14:132–39. (N. '13.)
Young, Karl. High-school courses in the history of English literature. English J. 2:500–504. (O. '13.)

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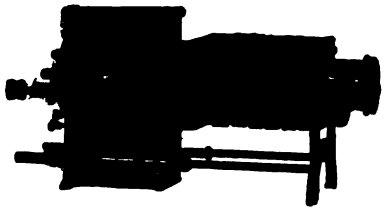

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The following publications of the Society *can be furnished by the University of Chicago Press:*

The History of Education: Burnham, Suzzallo; published as a bulletin of Teachers College, Columbia University, 1908. Price 53 cents, postpaid.

Observation and Practice Teaching in College and University Departments of Education: Farrington, Strayer, Jacobs; published in pamphlet form by the Society, 1909. Price 53 cents, postpaid.

The Aims, Scope, and Methods of a University Course in Public School Administration: Spaulding, Burris, Elliott; published as a pamphlet by the Society, 1910. Price 53 cents, postpaid.

Research within the Field of Education, Its Organization and Encouragement; Cubberley, Dearborn, Monroe, Thorndike; published as a pamphlet by the Society, 1911 (School Review Monograph No. I). Price 53 cents, postpaid.

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The Summer Quarter

of

The University of Chicago

1913

PRELIMINARY LIST OF COURSES

A Circular giving complete
information will be issued about March 1
and will be sent on request

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GENERAL INFORMATION

The Organization of the University includes: the Graduate School of Arts and Literature; the Ogden (Graduate) School of Science; the Colleges (Senior and Junior) of Arts, Literature, and Science; the Divinity School, the Law School, Courses in Medicine, the College of Education, the College of Commerce and Administration.

Faculty, Endowment, and Equipment.—The faculty numbers three hundred and thirty-seven; the libraries contain 381,351 books and 195,000 pamphlets (estimated). The University owns 90 acres of land in Chicago and has 35 buildings.

Location of the University.—The University grounds lie on both sides of the Midway Plaisance between Washington and Jackson parks, six miles south of the center of Chicago. Electric cars, elevated trains, and the Illinois Central suburban service reach all railway stations.

The University Year is divided into quarters: the Autumn (October to December); the Winter (January to March); the Spring (April to the middle of June); the Summer (middle of June to August). Students are admitted at the opening of each quarter; graduation exercises are held at the close of each quarter.

Admission to Colleges and Schools.—Students must present satisfactory evidence of the completion of a four years' course in an acceptable high school or academy in order to be admitted to candidacy for the Bachelor's degrees. Graduate students must possess Bachelor's degrees from accredited colleges. Qualified students over twenty-one may be admitted as unclassified students.

The Unit of Work and of Credit is a major, i.e., a course of instruction involving four or five recitations or lecture hours per week for a full quarter, or double that number of hours for a term of six weeks. A minor is one-half a major. Normal work is three majors per quarter, or nine per year of three quarters.

Degrees.—In the Graduate Schools are conferred the degrees of Doctor of Philosophy and Master of Arts, of Science, and of Philosophy; in the Colleges, the degrees of Bachelor of Arts, of Science, of Philosophy; in the Divinity School, the degrees of Bachelor of Divinity, Master of Arts, and Doctor of Philosophy; in the Law School, the degrees of Doctor of Laws and Bachelor of Laws; in the College of Education, the degrees of Bachelor of Arts, Philosophy, or Science, in Education.

Tuition, Fees, etc.—The regular fee for three major courses in Arts, Literature, and Science, and in the College of Education is $40 per quarter. All students pay once a matriculation fee of $5. In Law and Medicine, the fees are $50 and $60.

Cost of Living.—In University dormitories rooms rent from $25 to $75 per quarter. The charge for table-board in the women's halls is $4.50 per week. At Hutchinson Hall (à la carte service) board costs from $3.50 per week upward. Board and lodging may be had at the same or even lower rates outside the University.

Fellowships, Scholarships, Student Service, etc.—By virtue of endowments and special appropriations, fellowships and honor scholarships and service afford stipends or free tuition to a number of able and deserving students. Further information is contained in a circular entitled *Assistance to Students*, which will be sent upon request.

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THE SUMMER QUARTER

These Announcements are provisional and incomplete. A detailed circular will be issued about March 1.

The Calendar for 1913.—The First Term begins Monday, June 16, and closes Wednesday, July 23; the Second Term begins Thursday, July 24, and ends Friday, August 29, the Autumn Convocation being held on the afternoon of that day.

A Quarter of Regular Work for Credit.—In the personnel of the teaching staff, in scope and methods of instruction, and in credit-value the work of the Summer Quarter ranks with that of the other quarters of the academic year.

Precaution about Gaining Admission.—Undergraduate students should make sure that they are eligible for admission before they leave home for Chicago. Persons thus failing to make arrangements in advance may be rejected or directed to the University High School. Graduate students should inquire in advance as to their eligibility for registration in the Graduate Schools. Application in writing should be made to the University Examiners.

Limitation of Work, etc.—The student is limited to three minor courses for each term, or to three major courses for both terms. In special cases permission may be obtained from the deans to pursue an additional course, for which in the case of undergraduate students, a supplementary fee must be paid. Graduate and Law students are given larger privileges, and students in the College of Education may add one of the arts without additional fee.

Graduate Study.—College professors and school teachers, clergymen, and members of other professions, holding Bachelor's degrees from accepted colleges, may avail themselves of the facilities of the University to pursue advanced studies under the guidance of research professors in all the chief departments of investigation.

Biblical and Theological Study.—The Divinity School offers to professors of theology, to theological students, to ministers, to religious workers, and to others interested in biblical and theological study, introductory and advanced courses in all its departments. See p. 11.

Professional Courses in Law.—Students beginning the study of law, those in the midst of their professional studies at Chicago or elsewhere, and practicing lawyers are offered work of a thorough and systematic character. See p. 14.

Courses in Medicine.—College seniors planning to study medicine, students in medical schools, and practitioners will find the summer course in medicine admirably adapted to their needs. The Summer Quarter is of especial value to students who need to review and to make up work. See p. 16.

Educational Principles and Methods.—The courses of all departments have a bearing upon the work of teaching, but the courses of the College of Education are peculiarly adapted to the professional needs of teachers, both in primary and secondary schools. The work in the various shops affords unusually complete instruction in the industrial arts and crafts. See. p. 11.

Public Lectures.—A series of public lectures, concerts, and other forms of entertainment is scheduled throughout the Summer Quarter, and affords opportunity to students to hear speakers of eminence and artists of distinction.

Chicago in Summer.—An agreeable summer temperature, spacious parks, notable libraries and museums, great industrial plants, typical foreign colonies, a number of Settlements, and other significant social institutions make Chicago a peculiarly appropriate center for study and investigation.

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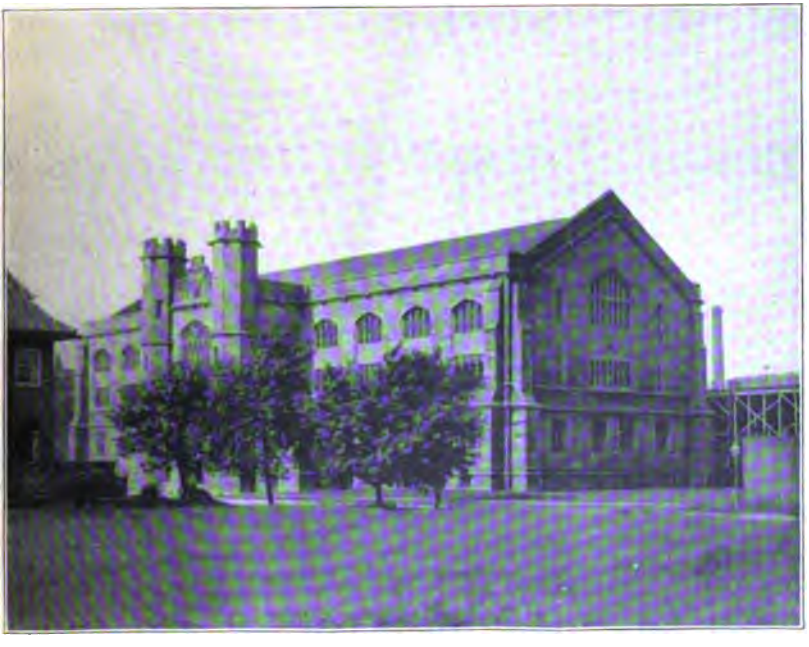

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Excursion Parties.—It has been customary, especially in the South, to organize special excursion parties for the journey to Chicago. The University will be glad to put inquirers into communication with the organizers of such parties.

ARTS, LITERATURE, AND SCIENCE

NOTE.—The following condensed paragraphs contain hardly more than titles of courses. No systematic attempt is made to indicate (*a*) the character of the courses; (*b*) to what types of students they are open; (*c*) what prerequisites are demanded; or (*d*) at what hours the classes meet. All details are given in the complete announcements, which will be mailed promptly to all who apply to the UNIVERSITY OF CHICAGO, CHICAGO, ILLINOIS.

Philosophy, Psychology, and Education.—Courses will be offered in Metaphysics, in Ethics, and in the History of Philosophy; in Elementary and Advanced Psychology, in Genetic and Experimental Psychology, in Educational Psychology, in the History of Education, in School Organization and Administration, in the Formation of the Curriculum, in the Relation of the Arts to the Course of Study, in Industrial Education, in Child-Study, and in the Pedagogy of the various subjects of the school course.

Political Economy, Political Science, History, Sociology and Anthropology, and Household Administration.—Courses will be offered in the Principles of Political Economy, in Transportation, in Taxation, in Public Finance, in Statistics, in Values, in Distribution of Wealth, and in Money; in Constitutional Law; in Ancient History, in Mediaeval and Modern History [Church and State], in English History, Political and Industrial, in American Constitutional History, and in various periods of Political and Industrial History, also Teacher's Course in American History; in Archaeology and Anthropology, in the Fundamental Ideas of Sociology, in the Growth of Sociological Method, in Rural Sociology, in Social Technology; in the Chemistry of Food Preparations, in Home Economics, in House Sanitation, and in the Legal and Economic Aspects of Household Administration.

Semitics and Biblical Greek.—Courses will be offered in the Interpretation of the Old Testament, in Elementary and Advanced Hebrew, in Assyrian and Egyptian Languages, and in History; and in New Testament History.

Comparative Religion.—Courses will be offered in the Outline History of Religion and in the Philosophy of Religion.

History of Art, Sanskrit, Greek, and Latin.—Courses will be offered in Prehistoric Art in Greece, in Greek Architecture, in Roman Sculpture, in Roman Coins, in an Introduction to the Study of Art, and in Flemish and Dutch Painting; in Elementary Sanskrit, in the Study of the Veda, in Hindu Religion, in Indo-European Comparative Philology, in an Introduction to the Study of Language, and in Outlines of Latin Historical Grammar; in Beginning Greek, in Anabasis, in Homer, Iliad and Odyssey, in Plato's Apology, in an Introduction to Greek Tragedy, in Aristotle's Poetics, in Lyric Poetry, in Isocrates, and in the Public Orations of Demosthenes; in Cicero, De Senectute, De finibus, Academica, and De Natura deorum, in Terence, the Phormio, in Livy, in Horace, Odes and Epodes, in Catullus, in Juvenal, in Virgil's Aeneid, with especial reference to the technique, in Ovid, Metamorphoses, in Horace, Satires, in Roman Private Life, in Colloquial Latin, and in the Training of Teachers, first-year work in the Training of Teachers, course in Caesar, and in the Comparative Syntax of the Greek and Latin Verb.

Modern Languages.—Courses will be offered in Old English, in Middle English, in various periods of English Literature, and in English Composition; in Elementary and Intermediate French, in Old French Literature, in various

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periods of later French Literature, in Phonetics, in French Grammar, in Spanish, and in Italian; in Elementary and Intermediate German, in the History of German Literature, in Recent German Literature and Drama, in Gothic, and in Middle High German; in Dante in English, and in the Short Story in various literatures.

Mathematics, Astronomy, Physics, and Chemistry.—Courses will be offered in Trigonometry, College Algebra, Plane Analytic Geometry, Graphic Analysis, Differential and Integral Calculus, in Advanced Calculus, in Theory of Functions, also Synoptic Course in Higher Mathematics; Definite Integrals, Differential

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Geometry, Theory of Physical Units, Theory of Numbers, Vector Analysis, General Analysis, and Reading and Research in Pure and Applied Mathematics; Descriptive Astronomy, Introduction to Celestial Mechanics, Analytic Mechanics, Research work at the Yerkes Observatory; Theoretical Optics, Light Waves and Their Uses, Advanced Spectroscopy, Relativity, Electron Theory, Research, work, Graduate laboratory work, Electric Waves, Mechanics, Molecular Physics and Heat, Electricity, Sound, and Light, and Physical Manipulation, two Courses for Teachers; Elementary General Chemistry; General Inorganic Chemistry, Elementary and Advanced Qualitative and Quantitative Analysis, Special Methods of Analysis, Elementary Organic Chemistry, Advanced Organic Preparations, Advanced Inorganic Preparations, Elementary and Advanced Physical Chemistry, Advanced Physico-chemical Measurements, Research in Organic, Inorganic, and Physical Chemistry.

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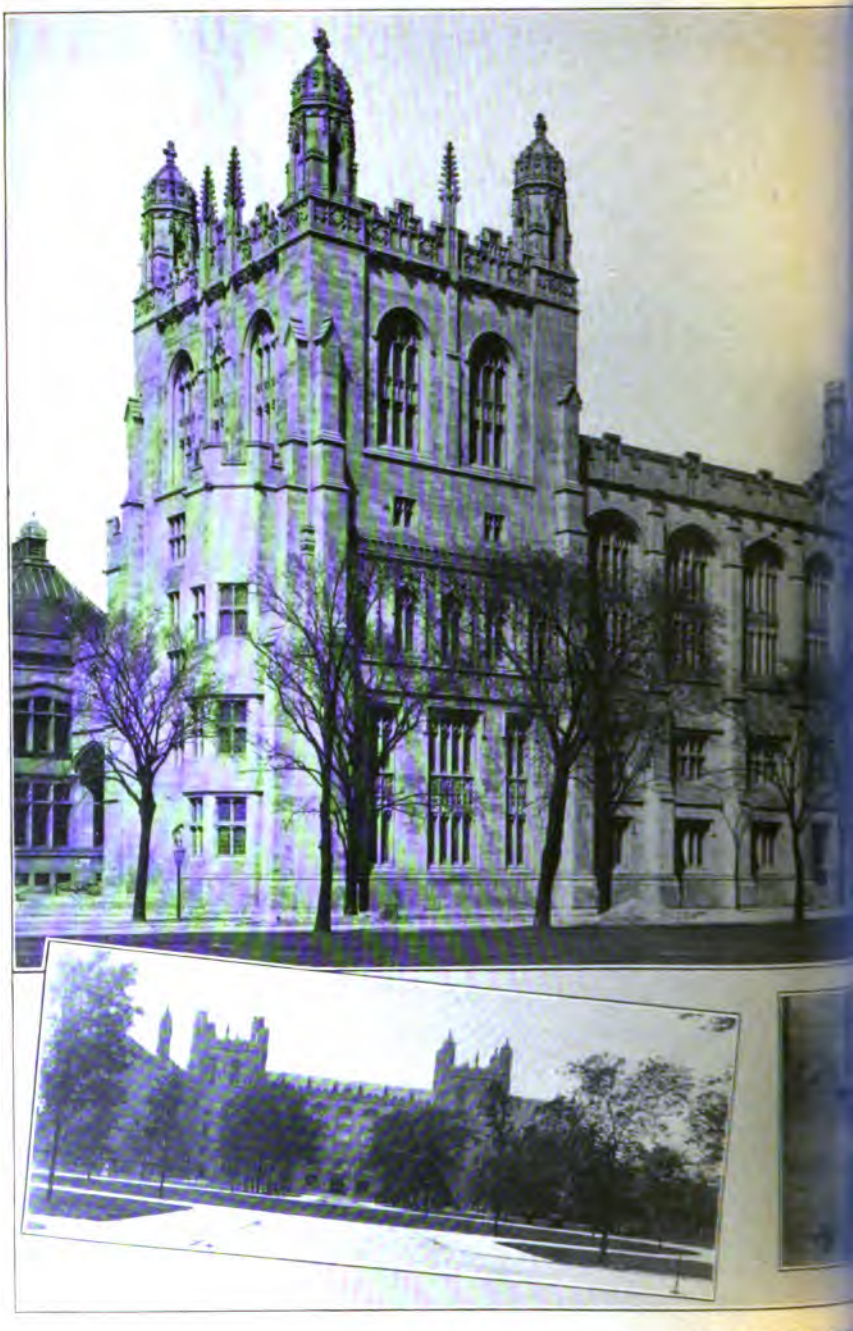

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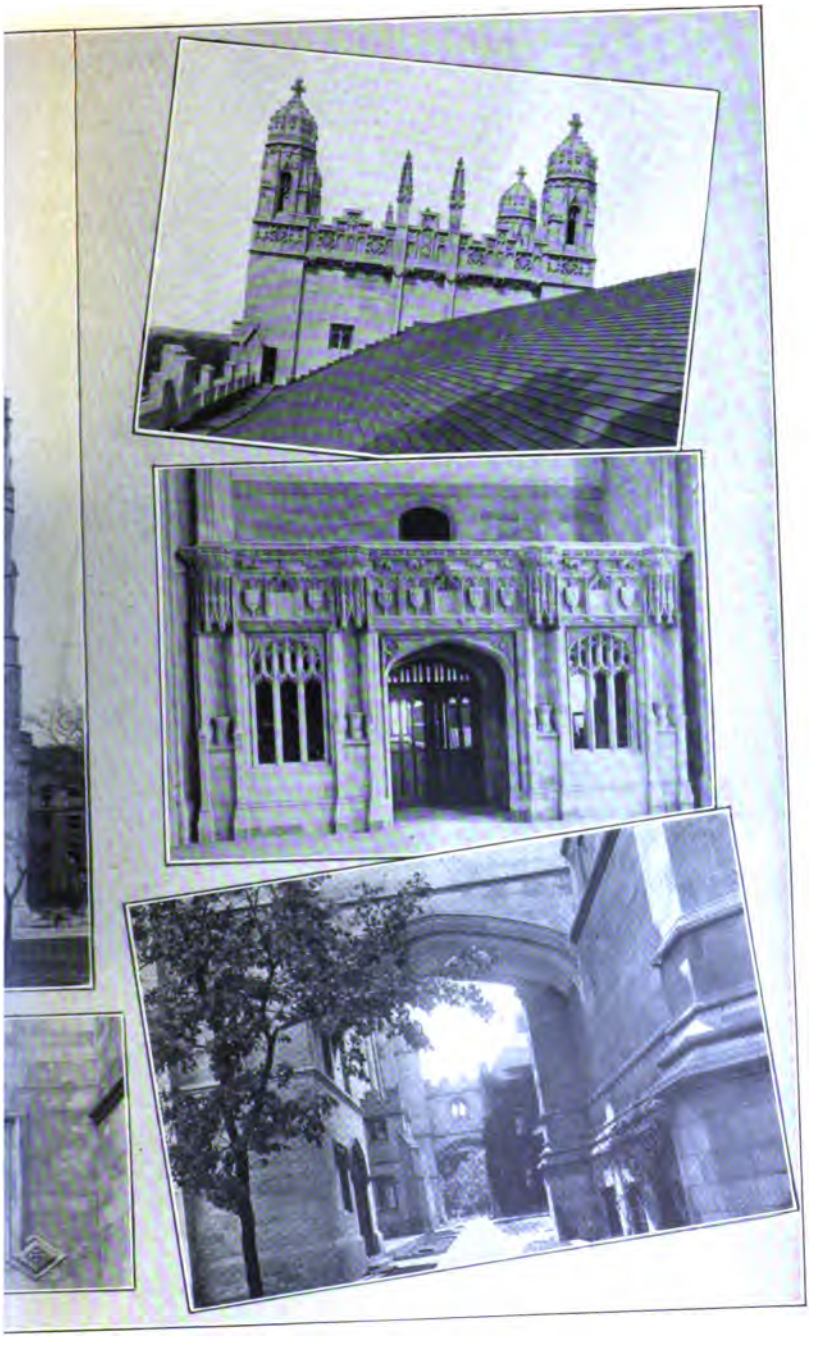

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Geology and Geography.—Courses will be offered in Physiography, in General Geology, in Economic Geology, in Elementary Mineralogy and Petrology, and several Field Courses for students of different stages of advancement; in the Conservation of Natural Resources, in the Geography of Europe, in Geographic Influences on American History, in Advanced and Elementary Commercial Geography, and perhaps in Anthropogeography.

The Biological Departments.—At the Marine Biological Laboratory, Woods Hole, Mass., courses in Zoölogy, Embryology, Botany, Physiological Chemistry, General and Comparative Physiology, and Biological Research, will be offered, for which credit is allowed in the University.

At the University of Chicago courses will be offered in Elementary Zoölogy, in Elementary Economic Field Zoölogy, in Experimental Behavior and Ecology,

HULL BIOLOGICAL LABORATORY AND MITCHELL TOWER

in Animal Geography, in Vertebrate and Invertebrate Zoölogy, in Genetics and Experimental Evolution, in Microscopical Technique, and advanced work in Zoölogy, including research, and in Embryology; in Introductory Anatomy; in Topographical Anatomy, Histology, in Anatomy of the Ear, Nose, and Throat, and in advanced research work; in Introductory Physiology, in Physiology of Digestion, Metabolism, Absorption, etc., in Physiology of Mammals, in Physiology of the Organs of Internal Secretion, in Research, and review courses in Physiology; in Teaching Botany in the High School, in Research in Morphology, in Special Morphology of Gymnosperms, in Research in Ecology, in Elementary Ecology, in Research in Taxonomy, in Classification of Vascular Plants, in General Morphology of Thallophytes, in Methods in Plant Histology, in Growth and Movement, in Research in Plant Physiology, in Elementary Plant Pathology, in Elementary Botany, and in Ecological Anatomy; in General Pathology and

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Pathological Histology, in the Pathogenic Bacteria, in Sanitary Water Analysis, and in Research in Pathology and in Bacteriology.

Public Speaking.—Courses will be offered in Elementary and Advanced work in Public Speaking, with particular stress on the Vocal Interpretation of Literature, Oral Composition, and the pedagogy of both subjects as applied to High-School and College curricula.

THE SCHOOL OF EDUCATION

The School of Education of the University of Chicago consists of four divisions: (1) The Graduate Department of Education; (2) The College of Education; (3) The University High School; (4) The University Elementary School.

The Graduate Department of Education gives advanced courses in principles and theory of education, educational psychology, history of education, and social and administrative aspects of education. The Master's degree and the degree of Doctor of Philosophy are conferred.

The College of Education is a College of the University, with all the University privileges, and in addition provides the professional training of elementary and secondary school teachers and supervisors. It offers undergraduate courses in professional subjects and in the methods of arranging and presenting the various subject-matters which are taken up in the elementary and secondary schools. Certain of these courses can be completed in two years and lead to certificates; other courses cover a period of four years and lead to a Bachelor's degree.

The University High School with the fully equipped shops of the Manual Training School is in session during the Summer Quarter. Opportunity is offered to take beginning courses in Latin and German and to review courses in Mathematics, English, and History. The regular shopwork supplemented by discussions of methods is open to teachers pursuing these courses.

The University Elementary School.—Only the kindergarten department of the Elementary School is in session during the first term of the Summer Quarter. This offers an opportunity for observation.

COURSE OF INSTRUCTION IN THE GRADUATE DEPARTMENT AND IN THE COLLEGE

Courses in the Pedagogy of History and Literature in the Grades, in Home Economics, in English, in Mathematics, Physics, Geography, the Biological Sciences, School Library Economics; also in Oral Reading and in Hygiene and Physical Education, in Kindergarten Theory and Practice, in Children's Reading, in Aesthetic and Industrial Arts, in Household Art, and Review Courses in various subjects in the High School, will be offered, in addition to those named on p. 3.

THE DIVINITY SCHOOL

Admission.—The Divinity School is open to students of all denominations. The instruction is intended for ministers, missionaries, theological students, Christian teachers, and others intending to take up some form of religious work.

The English Theological Seminary is intended for those without college degrees. It is in session only during the Summer Quarter.

The Graduate Divinity School is designed primarily for college graduates. Pastors, theological teachers, students in other seminaries, and candidates for the ministry with requisite training are admitted in the Summer Quarter.

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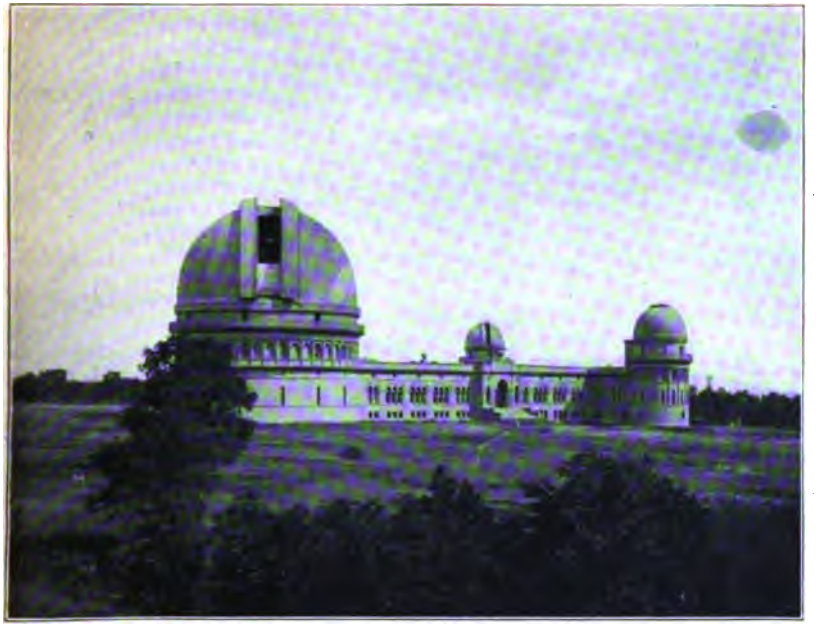

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Expenses.—No tuition fee is charged in the Summer Quarter. Incidental and library fees to the amount of $5 are charged, and matriculants pay the usual $5 fee. Dormitory rooms cost $8.75 to $12.75 per quarter; table-board about $3 per week in clubs or families.

In addition to the courses referred to on p. 3 there will be offered courses in Old and New Testament, in Biblical Theology, in Systematic Theology, in Church History, in Homiletics, in Religious Education, in Ecclesiastical Sociology, in Music, and in Public Speaking. Courses will be offered also in the Disciples' Divinity House.

THE LAW SCHOOL

Scope of Work.—The work of the Law School is intended for students whose education and maturity have fitted them to pursue serious professional study. The method of instruction employed—the study and discussion of cases—is designed to give an effective knowledge of legal principles, and to develop the power of independent legal reasoning. The three-year course of study offered constitutes a thorough preparation for the practice of law in any English-speaking jurisdiction. By means of the quarter system students may be graduated in two and one-fourth calendar years.

The Summer Quarter.—Regular courses of instruction counting toward a degree are continued through the Summer Quarter. Either advanced or beginning students may enter the school in the summer, and continue in the Autumn or in the next Summer Quarter. The courses are so arranged that students may take one, two, or three quarters in succession in the summer only, before continuing in a following Autumn Quarter. The summer work offers particular advantages to teachers, to students who wish to do extra work, and to practitioners who desire to study special subjects.

Building and Library.—The Law School occupies a building erected especially for it within the University quadrangles, and is equipped with a law library containing about 38,000 volumes.

Admission Requirements and Degrees.—Only college graduates or students who have had college work equivalent to three years in the University of Chicago are admitted as regular students, candidates for the degree of Doctor of Law (J.D.). The University permits one year of law to be counted as the fourth year of college work, making it possible to obtain both degrees in six years.

Students over twenty-one years old who have completed at least a four-year high-school course may be admitted as candidates for the degree of Bachelor of Laws (LL.B.), but must maintain a standing 10 per cent above the passing mark. In rare instances students over twenty-one who cannot meet these requirements will be admitted as unclassified, not candidates for a degree.

Fees.—A matriculation fee of $5 is required of every student entering for the first time. The tuition fee is $50 a quarter ($25 a term).

All correspondence concerning the Law School should be addressed to JAMES P. HALL, Dean of the University of Chicago Law School, Chicago, Ill.

Courses Offered.—During the Summer, 1913, the Law School will offer courses in: Contracts, Criminal Law, Title to Real Estate, Damages, Constitutional Law, Mortgages, Wills, Sales, and Trusts.

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THE SCHOOL OF EDUCATION

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COURSES IN MEDICINE

First Two Years of the Medical Course.—Courses in Medicine constituting the first two years of the four-year course in medicine of Rush Medical College are given at the University of Chicago. For the majority of students taking up medical work for the first time, it is of decided advantage to enter with the Summer or the Autumn Quarter. For the student who is lacking in any of the admission courses, or who seeks advanced standing, it is of especial advantage to enter for the Summer Quarter.

Requirements for Admission.—The requirements for admission comprise (*a*) fifteen units of high-school work, demanded for admission to the Junior Colleges of the University, and (*b*) two years of college work, which must have included at least four majors of college chemistry, including both inorganic and organic, and qualitative analysis (in addition to the year of high-school chemistry), one major of college biology with laboratory work, two majors of college physics, and a reading knowledge of German or French. Admission to advanced standing is granted students from other recognized institutions under suitable restrictions. *The inclusive fee in the Medical Courses is $60 per quarter.*

Courses for Practitioners.—All the courses offered are open to practitioners of medicine, who may matriculate as unclassified or as graduate students. No student may register for a particular course unless he has had the prerequisite work. Attention is called to the fact that certain courses of special value to practitioners are given in the summer. Practitioners taking this work are free to attend the clinics at Rush Medical College without charge.

Courses in Medicine will be found listed on p. 10.

VARIOUS UNIVERSITY ACTIVITIES

UNIVERSITY PUBLIC LECTURES

By means of public lectures and entertainments of an educational character the University presents many opportunities for culture and instruction apart from the work of the laboratory and the classroom. The lectures are delivered by eminent scholars. Concerts or recitals will be given Tuesday evenings and popular lectures Friday evenings throughout the Summer Quarter.

CORRESPONDENCE-STUDY DEPARTMENT

The teachers and students who for any reason cannot come into residence during the summer or other quarters may study under the direct personal guidance of University instructors who conduct by correspondence more than three hundred and twenty-five of the classroom courses. The tuition fee is $16 for one major, $30 for two, and $40 for three. Work may begin at any time.

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Bulletin of Recent Publications of *The University of Chicago Press*

1913

AGENTS

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Bulletin of Recent Publications of *The University of Chicago Press*

The Courts, the Constitution, and Parties. Studies in Constitutional History and Politics. By Andrew C. McLaughlin, Professor of History in the University of Chicago.

308 pages, 12mo, cloth; $1.50, postpaid $1.63

A volume of peculiar interest at this time, when the courts and political parties are subject to general criticism. The discussion is especially significant as coming from a lifelong student of constitutional questions, whose work at the University of Michigan, the Carnegie Institution of Washington, and as head of the Department of History in the University of Chicago, is so widely known. The point of view is historical. Though the articles are scientific they are directed to the reader who is interested in public affairs rather than to the professional student. The work consists of five papers, the first of which discusses the power of a court to declare a law unconstitutional. Two of the papers deal with the growth and essential character of political parties, and are followed by one on the history of differing theories of the federal Union. The work concludes with a discussion of the written constitution in some of its historical aspects, taking up the origin of these documents and the problems of their maintenance and interpretation in the development of the modern popular state.

The Mechanistic Conception of Life. Biological Essays by Jacques Loeb, Head of the Department of Experimental Biology, Rockefeller Institute for Medical Research.

238 pages, 12mo, cloth; $1.50, postpaid $1.65

The achievements of Professor Jacques Loeb in the field of experimental biology have made him so widely known as to insure any book of his a large circle of readers. His experimental work at the universities of Chicago and California, as well as in his present position, gives this volume an especial significance.

In his latest work, *The Mechanistic Conception of Life*, Professor Loeb presents many of the current problems in biology,

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and discusses the question whether the phenomena of life can be explained by physical and chemical laws. He finds it possible to control by physical or chemical means not merely the processes of reproduction, but also the conduct of animals with reference to environment.

The New York Medical Journal. The profession, as well as everyone interested in biology, will thank the author and the publishers for collecting these essays and placing them before the reading public.

The Chicago Tribune. It is refreshing to contemplate the wonderful exactitude, clearness, honesty, and unanswerable logic of Dr. Loeb.

Heredity and Eugenics. By John M. Coulter, William E. Castle, Edward M. East, William L. Tower, and Charles B. Davenport.

312 pages, 8vo, cloth; $2.50, postpaid $2.70

Leading investigators, representing the University of Chicago, Harvard University, and the Carnegie Institution of Washington, have contributed to this work, in which great care has been taken by each contributor to make clear to the general reader the present position of evolution, experimental results in heredity in connection with both plants and animals, the enormous value of the practical application of these laws in breeding, and human eugenics. The volume is profusely illustrated.

The Nation, New York. "Heredity and Eugenics" may be heartily recommended to readers seeking, as beginners, to get in touch with the discussion of these subjects. . . . . In most of the lectures there is an admirable reserve, not to say skepticism, in the treatment of large questions which the public is often misled to regard as already and finally settled.

Railway Economics. A Collective Catalogue of Books in Fourteen American Libraries. Prepared by the Bureau of Railway Economics, Washington, D.C.

450 pages, 8vo, cloth; $3.00, postpaid $3.28

Much of the literature relating to railways is widely scattered. The student of railway transportation finds it impossible to secure access to any all-embracing sources of information in any one of even the largest general libraries.

In the present work the Bureau of Railway Economics has undertaken to list the works relating to the economics of railway transportation that are catalogued in thirteen of the principal libraries of this country, together with those in its own collection.

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The volume can fairly lay claim to being a representative bibliography in the field of railway economics.

It is confidently believed that the work will prove valuable to all interested in the literature of railway transportation, and particularly to the economist and practical railroad man.

The Evening Post, New York. Of all these invaluable aids to the student which the librarians of the country are producing, this is the most exhaustive and workmanlike of any that has been issued in the economic field.

American Permian Vertebrates. By Samuel Wendell Williston, Professor of Paleontology in the University of Chicago.

152 pages, 39 plates, 8vo, cloth; $2.50, postpaid $2.68

This work comprises a series of monographic studies with briefer notes and descriptions of new or little-known amphibians and reptiles from the Permian deposits of Texas and New Mexico. The material upon which these studies are based was for the most part collected during recent years by field parties from the University of Chicago. The book is offered as a contribution to knowledge on the subject of ancient reptiles and amphibians, with such summaries and definitions—based chiefly on American forms—as our present knowledge permits. The work is illustrated by the author.

Athenaeum. The paleontologist will welcome the work as a solid contribution to our knowledge of a fauna which is of exceptional interest to the student of evolution, inasmuch as it includes forms that help to bridge over some of the differences between reptiles and amphibians.

Morphology of Gymnosperms. By John M. Coulter, Professor of Botany, and Charles J. Chamberlain, Associate Professor of Botany, in the University of Chicago.

470 pages, 462 illustrations, 8vo, cloth; $4.00, postpaid $4.22

This work is a revised and enlarged edition of the book brought out by Professors Coulter and Chamberlain in 1901. Each of the seven great groups is here presented in detail, and a final chapter discusses the problem of phylogeny and points out the evolutionary tendencies. The extinct groups, notably the primitive "seed-ferns," are now included for the first time; and vascular anatomy is fully recognized as a morphological subject of first importance. The entire presentation is thoroughly and system-

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atically organized and arranged with a view to the greatest possible clearness. The illustrations are numerous and in large part original.

Nature. The book is an invaluable record, admirably illustrated, of our present knowledge of the older type of seed-plants.

The Historicity of Jesus. A criticism of the contention that Jesus never lived, a statement of the evidence for his existence, an estimate of his relation to Christianity. By Shirley Jackson Case, Assistant Professor of New Testament Interpretation in the University of Chicago.

360 pages, 12mo, cloth; $1.50, postpaid $1.62

Did Jesus ever live, or is he a mythical personage like the deities of Greece and Rome? is to many people a somewhat startling question. But in recent years his actual existence has been vigorously questioned, and the subject is being given wide notice and discussion. The negative opinion has found supporters in America, England, Holland, France, and Germany. To present a complete and unprejudiced statement of the evidence for Jesus' actual existence is the aim of the author of *The Historicity of Jesus.*

The Nation, New York. It is creditable to American scholarship that the first survey of the entire debate should have been made by a representative of an American divinity school, and that the treatment of the question is adequate and fair in the presentation of the arguments on both sides, and marked by discernment both of the underlying principles and the consequences involved for the religious life.

Sociological Study of the Bible, Showing the Development of the Idea of God in Relation to History. By Louis Wallis, formerly Instructor in Sociology in the Ohio State University.

One volume, bound in cloth; $1.50, postpaid $1.68

This book is written on the basis of the modern scientific interpretation of the Bible; but it approaches Bible-study from a new point of view, using the sociological method of research. The ancient Hebrew nation is treated as a social group originating at the point of contact between Amorite city-states and Israelite clans from the Arabian desert. The great struggle within the nation was primarily between the legal usages of the constituent races. This conflict found expression very slowly in terms of

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antagonism between the gods of the Israelites and the Amorites. Mr. Wallis' papers on the subject have been appearing for some years in the *American Journal of Sociology;* but they are entirely recast and revised for book publication.

The Dial. A significant and closely reasoned work.

The Scotsman. Whether or not one agrees with Mr. Wallis, the originality and freshness of his views and the marked ability with which they are propounded cannot be denied.

The Minister and the Boy. By Allan Hoben, Associate Professor of Homiletics in the Divinity School of the University of Chicago.

Illustrated, 180 pages, 12mo, cloth; $1.00, postpaid $1.10

From the first chapter on "The Call of Boyhood," through one on "The Approach to Boyhood," the author leads us by suggestion and informing principle to realize the remarkable opportunity afforded by the raw material "boy," on which the minister may work. Later chapters on play and vocational choice show how to train the boy for citizenship, how responsive he is to the right sort of impetus, and how his religious life may indirectly, and even unconsciously, be stimulated by the proper appeal to his manly instincts, while furnishing him with a normal outlet for his natural enthusiasm. The book is practical throughout, and each chapter is filled with concrete suggestions which are vitalized by the author's actual experience as a basis.

Mr. Hoben's book is not only enlightening and entertaining, but is wonderfully practical. It should be in the hands of every probation officer, pastor, teacher, and parent.—JUDGE BEN B. LINDSEY.

Scientific Management in the Churches. By Shailer Mathews, Dean of the Divinity School in the University of Chicago.

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The Continent. Dean Mathews' treatment of the subject is practical, and his suggestions are exceedingly useful.

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The aim of the author is to present a faithful and, as nearly as possible within the limits of a manual, a comprehensive view of the development of ethical ideas among the Hebrew nation. To this end he takes the books, or parts of books, of the Old Testament in the order of their origin, and discusses their teaching, whether direct or indirect, on the duties that men owe to themselves, their families, and the larger world of which they are a part. This is the first volume to be issued in the series of "Handbooks of Ethics and Religion" edited by Shailer Mathews.

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Unity, Chicago. The unique and really valuable part of the Corbett work is his Pupil's Notebook that accompanies it.

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list of books to be read to the children, a list of verse collections, and a list of prose collections. The author's long connection with the Department of English in the Chicago Teachers College qualifies him to speak with authority on the subject. The book has been endorsed by the *Course of Study*, the official publication of the Chicago public schools.

Educational Review. A good book. . . . . The thoughtful and studious teacher of elementary English will find it full of helpful suggestions and advice.

Agricultural Education in the Public Schools. By Benjamin M. Davis, Professor of Agricultural Education in Miami University.

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In this book Professor Benjamin M. Davis has attacked the problem of the co-ordination of all the agencies now at work on the problem of agricultural education. He has performed a service which will be appreciated by all who have any large knowledge of the problem and of the difficulties which the movement encounters. He has made an effort to canvass the whole field and to give a detailed exposition of the forces employed in building up a rational course of agricultural education. He has presented more fully than anyone else the materials which define the problem and which make it possible for the teacher to meet it intelligently. The annotated bibliography at the end of the book will do much to make the best material available for anyone desiring to get hold of this material through independent study. The book serves, therefore, as a general introduction to the study of agricultural education.

Nature. Professor Davis may be congratulated on a most valuable and thoughtful expert contribution to the literature of his subject.

A Descriptive Catalogue of Manuscripts in the Libraries of the University of Chicago. Prepared by Edgar Johnson Goodspeed, Associate Professor of Biblical and Patristic Greek and Assistant Director of Haskell Oriental Museum.

140 pages, 8vo, cloth; $1.00, postpaid $1.11

This catalogue containing the description of ninety-nine manuscripts in the possession of the University of Chicago was published in connection with the dedication of the Harper

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Memorial Library, June 11, 1912. At that time the manuscripts were transferred to permanent quarters in the Manuscript Room of the new Library. Not all the manuscripts of the University are here included, the Greek papyri in Haskell Oriental Museum and the East Indian and other oriental manuscripts being reserved for separate treatment. Most of the manuscripts described in the catalogue came to the University with the Berlin Collection in 1891. The languages of the manuscripts include Latin, Greek, Italian, Spanish, French, German, English, Dutch, Icelandic, Hebrew, and Arabic.

Outlines of Economics, Developed in a Series of Problems. By Members of the Department of Political Economy of the University of Chicago.

160 pages, interleaved, 12mo, cloth; $1.00, postpaid $1.13

This book is an attempt on the part of its authors to make some advances in the direction of improving the current methods of teaching the elementary course in economics. The ideals which have shaped the character of the book are: (1) A belief that the elementary course in economics offers exceptional opportunities for training in thinking and reasoning—a sort of training the importance of which can hardly be exaggerated. The inductive-problem method here used is believed to be the one best adapted to accomplish this end. (2) A desire to connect the theoretical principles of economics with the actual facts and with problems of the business world, and to induce the student to apply his knowledge of that world to the subject of study.

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authors "not only to link economic theory with descriptive material, but in a measure to build the theory up out of the familiar events of economic life"; an attempt in which, we believe, they have succeeded as completely as the case admits.

Pragmatism and Its Critics. By Addison Webster Moore, Professor of Philosophy in the University of Chicago.

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The general discussion of the philosophical movement known as "pragmatism" has awakened so spirited a controversy that the present volume is especially timely and significant. Professor Moore lays stress on three phases of the question: (1) the historical background of the movement; (2) its relation to the conception of evolution; (3) the social character of pragmatic doctrines. *Pragmatism and Its Critics* is a good example of the modern type of philosophical exposition. It is in a free, conversational style, is profound without being difficult, and simple without sacrificing accuracy.

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The Theology of Schleiermacher. By George Cross, Professor of Christian Theology in the Newton Theological Institution.

356 pages, 12mo, cloth; $1.50, postpaid $1.65

Professor Cross's book attempts to introduce the English-speaking student to Schleiermacher himself. It consists principally of a condensed "thought-translation" of his greatest work, *The Christian Faith.* The exposition is introduced by the interesting story of Schleiermacher's life, with emphasis on his religious experience. This is accompanied by a luminous account of the changes in Protestantism that necessitated a reconstruction of its doctrines. The work closes with a critical estimate of Schleiermacher's contribution to the solution of present religious problems, which in the judgment of scholars will stand as an extremely valuable portion of the book. Taken together, the translation, the analysis, and the critical estimate reveal Schleiermacher as a pioneer in modern religious thought.

The Christian World, London. This work is as timely as it is able. It is remarkable that, considering the enormous influence of Schleiermacher on modern theology, the English-speaking world has hitherto had such meager opportunity of studying the man and his teaching.

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PUBLICATIONS IN SERIES

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The annual reports (each issued in two parts) contain important papers and discussions on pedagogical subjects, concerning which detailed information will be furnished on request. The Yearbooks for 1895–99, for 1902–6, and for 1907–11 have been bound together, the price of each volume being $5.00, postpaid $5.30.

Publications of the American Sociological Society.

Six volumes of Papers and Proceedings have been issued. Price per volume, $1.50, postage extra.

The School Review Monographs.

This is a series of educational papers recently begun under the supervision of the editors of the *School Review*. The first number, *Research within the Field of Education, Its Organization and Encouragement*, will be sent postpaid for 53 cents; the second number, embracing articles on various educational subjects, for 56 cents. Both have been prepared by the Society of College Teachers of Education.

Yearbooks of the Superintendents' and Principals' Association of Northern Illinois.

Seven Yearbooks have been issued. Price 50 cents each, postage extra.

Publications of the Western Economic Society.

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Philosophic Studies (Edited by James Hayden Tufts).

Three numbers have been issued. Price 50 cents each, postpaid 54 cents.

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The Biblical World. SHAILER MATHEWS, Editor in Chief. Published monthly, with illustrations. Subscription price, $2.00 a year; single copies, 25 cents; foreign postage, 68 cents.

The School Review. Edited by the Department of Education in the University of Chicago. Published monthly, except in July and August. Subscription price, $1.50 a year; single copies, 20 cents; foreign postage, 52 cents.

The Elementary School Teacher. Edited by the Faculty of the Elementary School of the University of Chicago. Published monthly, except in July and August, with illustrations. Subscription price, $1.50 a year; single copies, 20 cents; foreign postage 46 cents.

The Botanical Gazette. Edited by JOHN M. COULTER. Published monthly, with illustrations. Subscription price, $7.00 a year; single copies, 75 cents; foreign postage, 84 cents.

The Journal of Geology. Edited by THOMAS C. CHAMBERLIN. Published semi-quarterly, with illustrations. Subscription price, $4.00 a year; single copies, 65 cents; foreign postage, 53 cents.

The Astrophysical Journal. Edited by GEORGE E. HALE, HENRY G. GALE, and EDWIN B. FROST. Published monthly, except in February and August, with illustrations. Subscription price, $5.00 a year; single copies, 65 cents; foreign postage, 62 cents.

The American Journal of Sociology. Edited by ALBION W. SMALL. Published bimonthly. Subscription price, $2.00 a year; single copies, 50 cents; foreign postage, 43 cents.

The Journal of Political Economy. Edited by the Faculty of Political Economy of the University of Chicago. Published monthly, except in August and September. Subscription price, $3.00 a year; single copies, 35 cents; foreign postage, 42 cents.

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The American Journal of Theology. Edited by the Divinity Faculty of the University of Chicago. Published quarterly. Subscription price, $3.00 a year; single copies, $1.00; foreign postage, 41 cents.

The American Journal of Semitic Languages and Literatures. Edited by ROBERT FRANCIS HARPER. Published quarterly. Subscription price, $4.00 a year; single copies, $1.25; foreign postage, 26 cents.

Modern Philology. JOHN M. MANLY, Managing Editor. Published quarterly. Subscription price, $3.00 a year; single copies, $1.00; foreign postage, 41 cents.

The Classical Journal. FRANK J. MILLER, ARTHUR T. WALKER, and CHARLES D. ADAMS, Managing Editors. Published monthly, except in July, August, and September. Subscription price, $1.50 a year; single copies, 25 cents; foreign postage, 24 cents.

Classical Philology. PAUL SHOREY, Managing Editor. Published quarterly. Subscription price, $3.00 a year; single copies, $1.00; foreign postage, 23 cents.

The University of Chicago Magazine. Edited by a Board of Alumni. Published nine times a year. Subscription price, $1.50 a year; single copies, 20 cents; foreign postage, 27 cents.

Journal of the Association of Collegiate Alumnae. Published by the Association at the University of Chicago Press. Issued in January, March, April, and May of each year. Subscription price, $1.00 a year; single copies, 25 cents; foreign postage, 16 cents.

The English Journal. JAMES FLEMING HOSIC, Managing Editor. Published monthly, except in July and August, by the National Council of Teachers of English, at the University of Chicago Press. Subscription price, $2.50 a year; single copies, 30 cents; foreign postage, 45 cents.

Bibliography of Social Science. Edited by Dr. Hermann Beck, Berlin, and Dr. Charles Kinzbrunner, London, in co-operation with the Department of Political Economy in the University of Chicago. Published monthly. Annual subscription, $6.00. We are exclusive agents for the United States and Canada. Full information on combination rates with other journals on request. Complete sets of back numbers can be furnished at special rates.

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Arrangements have been completed by which the American agency for the following journals of the Cambridge University Press will be in the hands of the University of Chicago Press, beginning January 1, 1913:

Biometrika

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Correspondence regarding details of service on these journals is invited.

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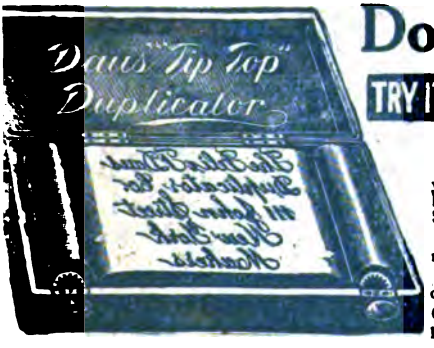

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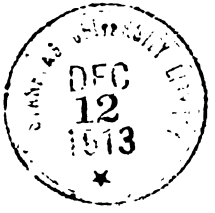

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THE SUMMER QUARTER FOR 1914

The Calendar for 1914.—It is expected that the Summer Quarter will begin Monday, June 15, and end Friday, August 28, the Autumn Convocation being held on the afternoon of that day. For further particulars see bulletin which will appear in March.

Limitation of Work, etc.—The student is limited to three minor courses for each term, or to three major courses for both terms. In special cases permission may be obtained from the deans to pursue an additional course, for which, in the case of undergraduate students, a supplementary fee must be paid. Graduate and Law students are given larger privileges, and students in the College of Education may add one of the arts without additional fee.

College Study.—The Summer Quarter is an integral part of the college year. Courses taken may be counted toward the Bachelor's degree as in any other quarter. The Summer Quarter may thus be used to supplement work in the other three quarters, and so reduce the ordinary four years' course to three; it may replace one of the other quarters taken as vacation; or a sufficient number of summer quarters may satisfy all the requirements for the degree. Members of the regular teaching staff in every department are in residence. Required courses are regularly given, and elective courses are repeated more or less frequently, according to demand.

Graduate Study.—College professors and school teachers, clergymen, and members of other professions, holding Bachelor's degrees from accepted colleges, may avail themselves of the facilities of the University to pursue advanced studies under the guidance of research professors in all the chief departments of investigation.

Biblical and Theological Study.—The Divinity School offers to professors of theology, to theological students, to ministers, to religious workers, and to others interested in biblical and theological study, introductory and advanced courses in all its departments.

Professional Courses in Law.—Students beginning the study of law, those in the midst of their professional studies at Chicago or elsewhere, and practicing lawyers are offered work of a thorough and systematic character.

Courses in Medicine.—College Seniors planning to study medicine, students in medical schools, and practitioners will find the summer course in medicine admirably adapted to their needs. The Summer Quarter is of especial value to students who need to review and to make up work.

Educational Principles and Methods.—The courses of all departments have a bearing upon the work of teaching, but the courses of the College of Education are peculiarly adapted to the professional needs of teachers, in both primary and secondary schools. The work in the various shops affords unusually complete instruction in the industrial arts and crafts.

Public Lectures.—A series of public lectures, concerts, and other forms of entertainment is scheduled throughout the Summer Quarter, and affords opportunity to students to hear speakers of eminence and artists of distinction.

Chicago in Summer.—An agreeable summer temperature, spacious parks, notable libraries and museums, great industrial plants, typical foreign colonies, a number of Settlements, and other significant social institutions make Chicago a peculiarly appropriate center for study and investigation.

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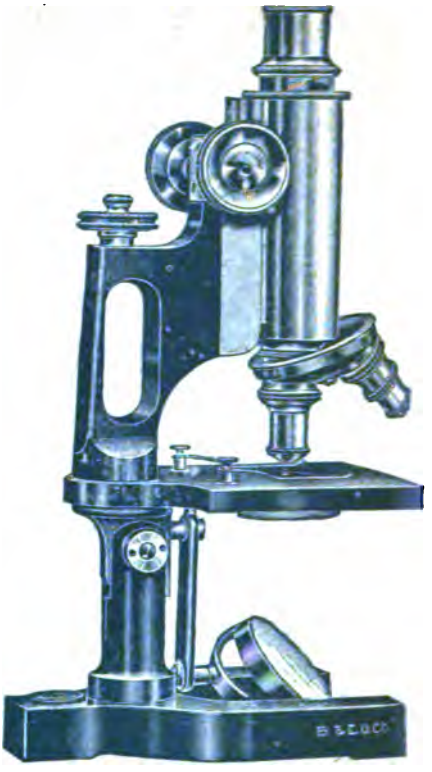

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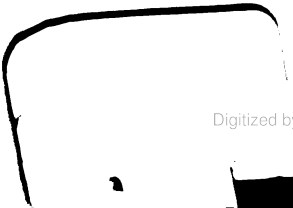

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